

# Program of Studies



2024-2025

Franklin High School

Somerset, NJ



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Dr. Kanika Chopra- Supervisor of Language Arts Literacy (6-12)

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Michael Herman – Vice Principal Class of 2024

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Cesar Rainho- Supervisor of Fine, Visual, Performing and Practical Arts

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Dr. Wendy Bordeau

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## **TABLE OF CONTENTS**

|   |          |
|---|----------|
| <b>District Affirmative Action Policy</b>                                   | <b>3</b> |
| <b>Sexual Harassment</b>  | <b>3</b> |
| <b>Harassment, Intimidation and Bullying</b>                                | <b>3</b> |
| <b>Equal Educational Opportunity</b>  | <b>3</b> |
| <b>Section 504/Americans with Disabilities Act (ADA)</b>                    | <b>3</b> |
| <b>Planning a Program of Study</b>  | <b>3</b> |
| <b>Minimum Scheduling Requirements</b>                                      | <b>4</b> |
| <b>Course Levels</b>  | <b>4</b> |
| <b>Graduation Requirements</b>  | <b>4</b> |
| <b>Grade Completion Requirements</b>  | <b>6</b> |
| <b>Eligibility For Participation in Athletics</b>                           | <b>6</b> |
| <b>Course Waiver</b>  | <b>6</b> |
| <b>Class/Course Transfer</b>  | <b>7</b> |
| <b>Grading</b>  | <b>7</b> |
| <b>Pass/Fail or Audit Option</b>  | <b>8</b> |
| <b>Scheduling Timeline</b>  | <b>8</b> |
| <b>Raritan Valley Community College Concurrent Enrollment Program (CEP)</b> | <b>9</b> |
| <b>Alternative Program: Road to Success</b>                                 | <b>9</b> |
| <b><u>ACADEMIC DEPARTMENTS</u></b>  |          |
| Career Education, Consumer and Family Sciences, and Life Skills             | 10       |
| English Language Arts   | 15       |
| Visual and Performing Arts  | 19       |
| Mathematics   | 29       |
| Health and Physical Education   | 35       |
| Junior Reserve Officers' Training Corps                                     | 36       |
| Science   | 36       |
| Social Studies  | 41       |
| World and Classical Languages   | 44       |
| Bilingual Education and English as a Second Language                        | 46       |

### **DISTRICT AFFIRMATIVE ACTION POLICY**

As delineated by Title IX of the Education Amendments of 1972 and New Jersey Administrative Code 6A:7, it is the policy of the Franklin Township Public Schools not to discriminate on the basis of gender, race, color, creed, religion, ancestry, national origin, age, marital, social, or economic status, disability, or sexual identity or expression in its educational programs, school activities and employment policies.

Each school in our district has a copy of the District Affirmative Action Plan located in the office of the principal. A grievance procedure for alleged violations of this policy, including issues related to sexual harassment, has also been established as part of this plan.

### **SEXUAL HARASSMENT**

The Franklin Township Board of Education seeks to provide a working and learning environment free from sexual harassment. It will be, then, a violation of this policy for students or staff members to harass other students or staff through conduct or communication of a sexual nature.

Any student or staff member who believes that he or she is a victim of sexual harassment should contact the building principal immediately.

### **HARASSMENT, INTIMIDATION AND BULLYING**

The New Jersey State definition of Harassment, Intimidation or Bullying is as follows:

“Harassment, Intimidation or Bullying” is defined as any gesture, any written, verbal or physical act, or any electronic communication that is reasonably perceived as being motivated either by any actual or perceived difference or characteristic, such as race, color, religion, gender, a mental, physical or sensory disability, sexual orientation, gender identity or expression, national origin or ancestry, or by any other distinguishing characteristic, that takes place on school grounds, at any school-sponsored function, on a school bus and that, or off school grounds; including via social media, that substantially disrupts or interferes with the orderly operation of the school or the rights of other students and that:

1. A reasonable person should know, under the circumstances, will have the effect of physically or emotionally harming a pupil or damaging the pupil's property, or placing a pupil in reasonable fear of physical or emotional harm to his/her person or damage to his/her property.
2. Has the effect of insulting or demeaning any pupil or group of pupils.
3. Creates a hostile educational environment for the student by interfering with a student's education or by severely or pervasively causing physical or emotional harm to the student.

In addition to the State definition, the Franklin Township Board of Education has determined that Harassment, Intimidation and Bullying also includes any act by a student toward another student which may be reasonably perceived as, or as having the effect of, one student attempting to exercise power or control over another student so as to deprive that student of his/her freedom from fear, or right to have his/her individual dignity respected.

### **EQUAL EDUCATIONAL OPPORTUNITY**

The Franklin Township Board of Education affirms its policy to ensure equal educational opportunity for all students and to prohibit discrimination because of sex, race, color, creed, religion, ancestry, national origin, sexual orientation, social/economic status, parenthood, marital status, and disability in the educational programs and activities, including but not limited to course offerings, athletic programs, guidance and counseling, tests and procedures, and vocational education opportunities through an Affirmative Action Program which shall be an integral part of every aspect of educational policies and programs.

### **SECTION 504/AMERICANS WITH DISABILITIES ACT (ADA)**

As delineated by Section 504 of the Rehabilitation Act of 1973 and the ADA of 1990, it is the policy of the Franklin Township Public Schools not to discriminate on the basis of a disability in its admissions and employment policies and procedures.

## **PLANNING A PROGRAM OF STUDY**

Planning an appropriate program of study involves a collaborative effort between home and school. A student's selection of courses should be based on careful consideration of the student's aptitudes and abilities, personal interests, and career aspirations.

In selecting a course of study, it is recommended that the following points be considered:

- Courses fulfill local graduation requirements.
- Prerequisite for a course has been met or exceeded.
- Courses are intellectually stimulating and personally enriching.
- Courses are relevant to post-graduate plans.
- Courses, not instructors, are chosen. Requests for schedule changes based on personnel issues will not be honored.
- Selected courses are discussed with those who can provide valuable insight; such as teachers, subject area supervisors and school counselors

## **MINIMUM SCHEDULING REQUIREMENTS**

It is recommended that every Franklin High School student carry a minimum of **30** credits per year in order to meet the 120-credit requirement for graduation. Semester courses can run first and/or second semester, depending upon the number of student requests for enrollment.

## **COURSE LEVELS**

Course level placement will be based on teacher recommendations and demonstrated competency within that discipline of study. These competencies are generally shown through classroom participation, proven record of academic achievement, successful completion of the prerequisite courses, and demonstrated willingness. If students and their parents/guardians do not agree with the recommended placement, a Course Selection Waiver form may be completed and returned to the counseling office. Course Waivers must be submitted no later than **June 28, 2024**.

## **GRADUATION REQUIREMENTS**

In order for a student to graduate from Franklin High School and receive the state endorsed Franklin Township Board of Education diploma, each student must:

- A. Demonstrate a minimum proficiency required by the state in language arts literacy and mathematics by means of subject specific NJSLA assessments, a Substitute Competency Test, or meet the criteria of the NJDOE Portfolio Appeal.
- B. Successfully complete a minimum of 120 credits. The course work must include the following course requirements:

|   |  |
|---|--|
| 1. English:   | 20 credits   |
| 2. Mathematics:   | 15 credits, including content equivalent to Algebra I and Geometry   |
| 3. Science:   | 15 credits, including content equivalent to Biology, and 2 additional lab laboratory/inquiry-based science courses |
| 4. United States History:                                 | 10 credits, or pupil demonstration of proficiency  |
| 5. World History  | 5 credits, for each year of public high school enrollment in NJ  |
| 6. World Languages:                                       | 5 credits  |
| 7. Physical Education/Health & Safety:                    | 5 credits for each year of public-school enrollment  |
| 8. Visual, Fine, Performing Arts:                         | 5 credits  |
| 9. 21 <sup>st</sup> Century Life and Career or Technical: | 5 credits  |
| 10. Financial Economic & Business Literacy                | 2.5 credits  |
| 11. Race Gender and Equity:                               | 2.5 credits for Class of 2025 and beyond   |
| 12. Elective Courses:                                     | 15 credits   |
|   | Or   |

## Option II

Pursuant to N.J.A.C 6A:8-5.1(a)2 New Jersey high school graduation requirements may be met in whole or in part through the completion of a program of study that meets or exceeds the New Jersey Content Standards. The purpose of Option II is to provide students with meaningful and relevant educational experiences beyond the scope of the current school curriculum. Prior approval is required. A program model may include, but is not limited to, the following:

- Independent Study
- Online Learning
- Community Service/Service-Learning Projects
- Study Abroad and Student Exchange
- Other structured experiences

The Option II alternative program of study must receive prior approval of the Option II Committee, meet or exceed the standards set forth in the New Jersey Standards, and students must demonstrate satisfactory performance in order for credit to be awarded.

Participation in Option II programs is completely voluntary, and a student may choose to complete graduation requirements through the traditional curriculum offerings, Option II programs, or a combination of the two. It is understood that students and their parents/guardians will be responsible for any and all costs, transportation, and personal safety of students wishing to participate in Option II programs.

### Procedures for Implementing Option II:

#### Application process:

Students and/or their parents may initiate a request for an Option II activity. All requests must be made in writing directly to the Option II Committee, which consists of the Director of Guidance, a school counselor, a subject area supervisor, and a building level administrator. Other school personnel may be added at the discretion of the principal.

Requests for Option II activities must be submitted on application forms available in the counseling office or online and submitted by May 10, 2023 for the fall semester in which they are proposed for implementation.

Approval or denial of a requested Option II program will be returned to the student and his/her parents or guardians.

#### Program Assessment:

In order to assess appropriate program progress, students will be required to submit evidence of program attendance and progress. This may include, but is not limited to, time sheets or grades.

Data from all approved programs will be collected at the end of each marking period and assessed by the Option II Committee for inclusion in the student's cumulative records.

If at any time a student fails to comply with or complete program requirements, they will receive a failing grade on their permanent academic record.

#### Appeal Process:

Students who have had their Option II proposal rejected should appeal in writing directly to the Option II Committee. The committee will then report their findings and offer a rationale as to why the proposal was rejected. Students will then have an opportunity in which to resubmit alternate proposals for consideration, as long as this is completed within the proposed timeline.

Students or their parents may appeal a decision of the Option II Committee, after they have met with the committee, directly to the Superintendent of Schools, whose decision will be final.

Note: Minimum graduation requirements should not be confused with college/university admission requirements. The general rule for most four-year colleges/universities is that applicants should have completed

a minimum of 16 to 18 academic units upon graduation. Normally, academic units are considered to be full and half-year courses in college preparatory Math, Science, English, Social Studies, and World Languages.

**GRADE COMPLETION REQUIREMENTS**

A high school student will be promoted to the next grade when he or she has completed the credits requirements listed in the chart below.

| <i>PROMOTION</i>             | <i>NUMBER OF CREDITS REQUIRED</i> |
|------------------------------|-----------------------------------|
| <i>Promotion to grade 10</i> | <i>30 credits</i>                 |
| <i>Promotion to grade 11</i> | <i>60 credits</i>                 |
| <i>Promotion to grade 12</i> | <i>90 credits</i>                 |

**ELIGIBILITY FOR PARTICIPATION IN ATHLETICS**

To be eligible for athletic competition, a student must fulfill the following credit requirements, which vary by grade level as follows:

**First Semester:**

|  |  |
|--|--|
| <b>9<sup>th</sup> Grade</b>                    | all students are eligible  |
| <b>10<sup>th</sup> – 12<sup>th</sup> Grade</b> | a student must have passed 30 credits required by the State of New Jersey for graduation during the preceding academic year. |

**Second Semester:**

|   |   |
|---|---|
| <b>9<sup>th</sup> - 12<sup>th</sup> Grade</b> | a student must have passed 15 credits required by the State of New Jersey for graduation at the close of the proceeding semester. |
|---|---|

Full year courses will be equated as one-half of the total credits to be gained for the full year to determine credits passed during the preceding semester.

***Participation in College Athletics***

Students interested in participating in college athletic programs regulated by the National Collegiate Athletic Association (NCAA) must be certified through their Initial Eligibility Clearinghouse. Students must achieve a certain level of academic achievement in high school in order to participate in college athletics. Additional information may also be obtained at [www.eligibilitycenter.org/](http://www.eligibilitycenter.org/). Applications should be submitted no later than the summer after the junior year. Coaches, parents, and prospective athletes should work closely with the Counseling and Athletic Department on college admissions.

## COURSE WAIVER

Students who wish to enroll in a course in which they have not met the course's prerequisites and/or did not receive a teacher's recommendation may enroll in a course if they have signed a Course Waiver and complied with the following guidelines.

- Students and/or their parents/guardian may obtain a Course Waiver only by conferring with the student's present academic teacher and their school counselor and understand that they are overriding the placement recommendation of the school's administration and teachers.
- Completed applications are to be submitted directly to the counseling department for processing.
- All waiver applications must be received by **June 28, 2024**. Waivers turned in after June 30<sup>th</sup> will not be considered.

When a student seeks to waive into a higher level, it is important to remember that the student is taking on an additional academic responsibility. Course levels are designed in relation to the pacing of the curriculum, methods used to teach the curriculum, and the level of student independence in directing their learning. There is often a period of adjustment while a student learns what is expected of them in a new course. Once a waiver is signed, it is expected that the student will assume responsibility for getting help if they encounter any academic difficulties.

Please note that the decision to grant a waiver is based upon a student's written statement, a signed Course Waiver application, and available space.

## CLASS/COURSE TRANSFER

Since student schedules are developed after considerable deliberation by students, parents, teachers, and counselors, course withdrawal is discouraged. Students will have until **June 28, 2024** to make adjustments in their course requests.

Classes will only be changed for the following reasons:

- Student has been scheduled for an incorrect class
  - Course level change as a result of summer work/study
  - Elective(s) changes are possible only if the new elective(s) is/are offered during the same period. All other changes must adhere to the following:
1. No student will be permitted to drop a course after **September 27, 2024** without the express written permission of the parent, teacher, department supervisor, director of counseling, and the principal, or his/her designee.
  2. A student who withdraws from a course at any time up to September 27, 2024 will be removed from the class roster. No record of this withdrawal will appear on the student's permanent record.
  3. A student who is allowed to withdraw from a year or semester course at any time after the deadline will be removed from the class roster. A record of Withdraw Pass (WP) or Withdraw Fail (WF) will be maintained throughout the remainder of the year and recorded on the student's permanent transcript.
  4. Changing courses after the academic year has begun can often be very disruptive to a student's schedule. Thus, elective course changes will not be permitted if they interfere with academic courses already scheduled. No new elective additions may be added after **September 28th** for a semester course and for a full year course. Second semester elective additions may be added no later than the second week of the second semester. Additionally, the student is responsible for completing all missed work.
  5. In all schedule changes, a drop/add form must be completed and signed by all involved parties. There must be an open seat in the requested course. The department supervisor must grant prior approval before a schedule change is initiated.

6. 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.
7. A student who has pursued an organized course of study outside the school day or school year for advancement of a course level must meet all criteria and established deadlines. Placement in an approved course is not guaranteed because priority is given to those students who have enrolled in the course through the regular scheduling process.

### GRADING

Student report cards are issued four times each year. A student's marking period and exam grades will be used to compute the final grades. Percentages will be totaled and divided in order to determine the grade for the year. Marking period grades count as 22% of the total grade and the final exam counts as 12%. The following grading system is used:

|   |   |          |
|---|---|----------|
| A | = | 90-100   |
| B | = | 80-89    |
| C | = | 70-79    |
| D | = | 60-69    |
| F | = | below 60 |

Parents and students may access grades throughout the school year through the Parent Access on Genesis.

### Grade Point Average/Class Rank

Both weighted and unweighted grade point averages (WGPAs and GPAs) are calculated. WGPA is based on an open-ended scale beginning with 0.00 and having no ceiling. Only the final grade achieved in each course is used to compute the GPA and the WGPA. All graded (non-pass) courses are used in computing the WGPA. Coursework completed outside the parameters of the FHS academic day does not count towards the WGPA or GPA. The sum of the quality points is divided by the sum of the credits attempted to form the grade point average. Courses are weighted according to their difficulty per the following quality point values. AP Courses are awarded 10 additional quality points. Honors Courses and Concurrent Enrollment Program (CEP) courses are awarded 5 additional quality points.

The student's standing in his or her graduating class is determined according to the cumulative weighted grade point average (CWGPA). Class rank is formulated by arranging the CWGPA of all students and numbering them in order from highest to lowest. The student with the highest CWGPA is ranked number one. If two or more students have the same CWGPA when calculated, the students will be given the same rank.

Transfer Students: Transcripts of incoming students are reviewed on an individual basis with appropriate credit and weight assigned to completed courses. An honors course completed at one school will receive appropriate weight at FHS. A student must be in attendance at FHS prior to starting his or her senior year for a class rank to be assigned.

### PASS/FAIL OR AUDIT OPTION

Students interested in pursuing the Pass/Fail or Audit option must first meet with their school counselor to discuss this decision.

- Students who wish to take a course on a Pass/Fail or Audit bases must obtain a form from the Counseling Department. Students must return this form with all appropriate signatures to the Director of Counseling to be considered. This option is to be chosen during the first two weeks of class attendance.
- Students may elect to take one course each semester on a Pass/Fail or Audit basis. If a student elects a full-year course, no other course may be taken Pass/Fail or Audit. No student will be allowed to take a course required for graduation under this option.
- Once the Pass/Fail or Audit option has been elected and the class has started, students may not request a change back to a traditional letter grade.

- Students choosing the P/F option for a particular course will receive a P or F for all quarter, semester, exam, and final grades associated with that course.
- In order to receive a passing grade, students must fully participate in all aspects of the course, including all assessments and projects.
- Grades of “P” or “Credit” will not be included for computation of the grade point average, due to difficulty in numerical translation. Grades of “F” or “No Credit” will, however, be included.

ALTERNATIVE PROGRAM: ROAD TO SUCCESS

The mission of the Franklin Township Alternative Program, Road to Success, is to provide an opportunity for enrolled students to graduate high school and be college and/or career ready.

Specifically, the program will provide options for students who are currently not reaching their potential in a traditional education setting.

The Road to Success program is intended to successfully lead students towards their educational goals through the use of innovative teaching techniques, greater access to counseling services, more individualized course studies, unique program hours (3pm to 7:15pm), lower student/teacher ratios and a more supportive and encouraging school atmosphere.

SCHEDULING TIMELINE

Course of Study Orientation for Parents will be held **January 18, 2024** at 6 p.m. on Zoom for rising ninth grade students. Course of Study Orientation for Students at Franklin Middle School and Franklin High School will be held in January.

Students (and parents if so desired) will meet with the counselor individually to register for courses during the months of February through March. Remember to choose courses wisely as initial low requests totals may lead to the cancellation of a course.

Initial course requests will be provided to students in April 2024 to be verified by student and parent. Please contact the Counseling Office at 732-302-4200 immediately if any discrepancies are found.

Final review of the teacher placement recommendations are due by **February 16, 2024**. The original course request will be changed to reflect the recommendation.

Class cancellation/class conflicts will be rectified on an ongoing basis once the master schedule is determined. Because of staffing and completion of the master schedule, requests for schedule or placement changes will not be honored after **June 28, 2024**.

Final schedules will be received by students before the first day of school. Please refer to the previously stated procedures for class and or course transfers.

CONCURRENT ENROLLMENT PROGRAM (CEP)

The Concurrent Enrollment Program (CEP) is a partnership between Raritan Valley Community College, Seton Hall University, and Franklin High School to provide qualified high school students the opportunity to enroll in challenging college courses as part of their high school day. CEP students earn academic credit that simultaneously fulfills high school and RVCC requirements.

To be eligible for the Concurrent Enrollment Program, students must:

- Be a high school junior or senior
- Have a minimum 3.0 GPA (Exceptions may be made with a letter of support from a teacher in the relevant discipline)
- Obtain signatures from high school counselor, as well as parent/guardian
- Meet testing pre-requisites for courses chosen

*Testing Requirements for English/Math*

All students are required to take a placement test for enrolling in RVCC English or Mathematics classes, unless the student has the following: (subject to change pending review of new SAT scoring)

- SAT Critical Reading score of 540 or above or an ACT English score of at least 24
- SAT math score of 530 or ACT math score of 22 for select college level Math courses; or an SAT math score of 550 or ACT math score of 23 for Pre-calculus or Statistics.

For more information about placement testing, please refer to the following:

[http://www.raritanval.edu/academic\\_programs/early-college-programs/concurrent-enrollment-classes](http://www.raritanval.edu/academic_programs/early-college-programs/concurrent-enrollment-classes)

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## Career Education, Consumer and Family Sciences, and Life Skills

### BUSINESS TECHNOLOGY

#### **9012: BUSINESS: AN INTRODUCTION: 2.5 credits Grades 9-12**

This introductory elective is open to students who want to learn about the business world. Students will learn about business practices in areas such as banking, insurance, transportation, and investments. Students can expect to participate in discussions, solve business problems via computer simulations, and complete business projects. Students will have an opportunity to participate in Junior Achievement/Project Business where they will form, operate, and liquidate their own business.

#### **9032: ACCOUNTING I: 5 credits Grades 10-12**

This is an elective course open to students who are interested in accounting as a career, or for personal use. Students can expect to analyze business transactions, record information in business journals, and maintain business records. In addition, students will prepare income tax returns, maintain checkbook records, and reconcile a bank statement. Students will use microcomputers to solve accounting problems.

#### **9042: ACCOUNTING II: 5 credits Grades 11-12**

*Prerequisite: Accounting I*

This is an elective course open to students who have a strong interest in accounting as a career or who will require a knowledge of accounting for other careers. Students will study accounting systems, controls, records, and financial reports. Students can expect to learn about advanced accounting problems in a corporation. Students will use microcomputers to solve accounting problems.

#### **9092: ENTREPRENEURSHIP: 2.5 credits Grades 10-12**

New businesses are a major source of inventions, innovation, and new jobs. Students will learn how to organize and manage these new businesses and learn about the risks and rewards of owning a business.

#### **9100: SUPPLY CHAIN MANAGEMENT: 2.5 credits Grades 9-12**

*Prerequisite: Entrepreneurship, Marketing I, Business Law* This course provides an overview of the flow of goods and services from raw materials to finished products. This business function holistically integrates key processes such as planning, purchasing, inventory control, transportation, and warehousing. Students will learn about topics such as designing supply and distribution networks as well as improving supply chain performance. Lessons will be learned by studying some of the world's top supply chains and how they reduce risks, maximize efficiency, and increase profit.

#### **9132: PRINCIPLES OF BUSINESS LAW: 2.5 credits Grades 10-12**

Students will learn about law as it applies to business or everyday life. Students will learn about the organization and functions of courts, basic principles of law and its application to business practices, and can expect to study laws that apply to typical business situations such as contracts, agencies, warrants, and other legal areas.

**9142: APPLIED BUSINESS LAW: 2.5 credits Grades 10-12**

Students will learn legal rights and obligations in the following areas: employer/employee relationships, travel, use of motels and/or hotels, use of public utilities, lending, and ownership. Students can expect to study laws, review cases, and identify laws that apply in typical business situations.

**9155: PERSONAL FINANCE: 2.5 credits Grades 9-12**

Students will develop lifelong decision-making skills in order to manage their personal finances. Students will learn about their various financial responsibilities and will be provided with opportunities to investigate many important areas related to financial security. This course will also give insight into how businesses manage their finances and why wise financial management is critical to personal and business success. Some of the topics covered will include budgeting, credit, investing in the stock and bond markets, taxes, and insurance. In addition, students also participate in the Stock Market Game.

**9162: MARKETING I: 2.5 credits Grades 9-12**

This is an elective open to students who are interested in a career in the field of marketing and distribution. This course offers instruction in retailing, marketing, merchandising, related management, and personal development.

**9164: SPORTS AND ENTERTAINMENT MARKETING: 2.5 credits Grades 9-12**

*Prerequisite: Marketing I or Entrepreneurship*

The field of sports and entertainment marketing is rapidly growing. Many institutions offer specializations in sports and entertainment marketing. Sports and Entertainment Marketing challenges students to incorporate concepts they have learned in Marketing I and will require students to use creativity and higher-level thinking skills to develop marketing strategies in a highly competitive industry.

**9165: FASHION MARKETING: 2.5 credits Grades 9-12**

*Prerequisite: Marketing I or Entrepreneurship*

Fashion Marketing is a project-based course designed to provide students with knowledge of the various business functions in the fashion industry. Students in Fashion Marketing will gain a working knowledge of promotion, textiles, merchandising, mathematics, and selling. Students build upon the conceptual base that was introduced in Marketing I. Throughout the course, students take an in-depth look at styles which are popular today and study current trends in fashion. Students will develop their own fashion brand and design a shopping bag and hang tag for the brand. Students are made aware of how marketing shapes the fashion industry and learn about possible career opportunities in fashion

**9173: CTE MARKETING I: 2.5 credits Grades 9-10**

This is an elective open to students who are interested in a career in the field of marketing and distribution. This course offers instruction in retailing, marketing, merchandising, related management, and personal development. Topics include the marketing mix, marketing functions, advertising, selling, target markets and SWOT analysis. Students will be eligible to complete an internship in the Athletic Department's Concession services, assisting in researching vendors, making purchases, keeping inventory, and learning customer service.

**9174: CTE MARKETING II: 5 credits Grades 10-11**

*Prerequisites: CTE Marketing I*

A project-based/student centered business course, Marketing II builds on the principles and concepts taught in Marketing I. Students assume a managerial perspective in applying economic principles in marketing, analyzing operation needs, examining distribution and financial alternatives, managing marketing information, pricing products and services, developing product/service planning strategies, promoting products and services, purchasing, and professional sales. This course also deals with global marketing in that students analyze marketing strategies employed in the U.S. versus those employed in other countries

**9175: MARKETING II: 5 credits Grades 10-12**

*Prerequisites: Marketing I, Entrepreneurship or Business Psychology*

This course is for students who want to acquire additional skills, knowledge, and paid work experience in the field of marketing. Some of the topics students will study are retail selling, visual merchandising, advertising, sales promotion, buying, and pricing merchandise.

**9185: MARKETING III: 5 credits Grades 11-12**

*Prerequisite: Marketing II*

This course is open to students who want to acquire additional skills, knowledge, and paid work experience in the field of marketing. Some of the topics studied are display techniques, business services, salesmanship, stock control, and buying techniques.

**CONSUMER AND FAMILY SCIENCES**

**6512: CHILD DEVELOPMENT/PARENTING: 2½ credits Grades 10-12**

This course is designed for those who are interested in child development and parenting. Students will study the mental, physical, emotional, physiological, and nutritional needs of young children. Students will also study the principles and methods of parenting and guiding children at their various developmental levels in varying situations. Students will use the computer to complete simulations and other learning activities.

**6522: EARLY CHILDHOOD LABORATORY: 5 credits Grades 11-12**

*Prerequisite: Child Development/Parenting. Admission to this class is by application and teacher interview. Please see your counselor to pick up an application.*

This course is designed for students interested in working with children. Students will study early childhood development and acquire the competencies needed for working with children. Students will be exposed to various career opportunities and gain practical experience in a preschool program with community children. Education for parenthood will serve to guide many of the classroom experiences. Students will complete a yearly case study on an enrolled child.

**6552: FASHION AND DESIGN: 2.5 Credits Grades 9 - 12**

Fashion and Design is a project-based semester long course, open to 9th-12th graders. The course will introduce basic design elements and principles, color theory, sewing tools, fabric and sewing machine terminology. Students will incorporate concepts they have learned in Marketing I.

**6652: FASHION & DESIGN II: 2.5 Credits Grades 9 - 12 - Pending Board Approval**

*Prerequisite: Fashion & Design I*

Fashion & Design II will build on the concepts from Fashion & Design I, helping students to develop their creativity and technical skills. Students will learn more about fabrications and what they are best used for. Learned skills include practicing new sewing and finishing techniques including setting a zipper and sewing a buttonhole. Students will develop their fashion sketching techniques

**6589IS: INDEPENDENT STUDY IN EARLY CHILDHOOD EDUCATION HONORS: 5 credits**

*Prerequisite: Early Childhood Lab with an 85 average or higher.*

To be eligible the student must be a senior who has completed the early childhood program. Students are required to write lesson plans and teach the students that attend the pre-school program at FHS.

**9910: CHARACTER DEVELOPMENT AND ETHICS: 5 credits Grades 9-12**

*Prerequisite: By recommendation only*

This course provides students with a bio-psycho-social framework within which to explore the factors that affect the development of positive self-regard, healthy relationships, physical and emotional self-care, problem solving skills, and emotional/behavioral self-regulation. Students will develop a greater understanding and appreciation for their own unique qualities and abilities, while identifying both age-appropriate developmental tasks and challenges that are specific to their own life histories. will identify the healthy and unhealthy coping skills that they typically employ and will learn a variety of positive coping skills to promote resilience and well-being.

## TECHNOLOGY

### **6042 DESIGN TECHNOLOGY: 5 credits Grades 9-12**

The design technology course is a great course for students contemplating a career in engineering or technical designing. It is a beginning course which assumes the students have no prior experience in technological topics. The students will gain competence in reading and creating blueprints. This will be done both by hand-drafting and working with a computer (CAD). Students will also learn how to create objects using a 3-D CAD program which allows the objects to then be 3-D printed. Engineering principles will also be covered throughout the course with short assignments and longer projects as well.

### **6043 ADVANCED DESIGN TECHNOLOGY: 5 credits Grades 10-12**

*Prerequisite: Design Technology*

The advanced design technology course gives the students a chance to use their prior knowledge to create more complicated and impressive projects. The students will learn advanced techniques in the use of CAD and will engage in some hands-on projects as well. This is a great course for students who enjoyed the Design Technology course and would like to hone their skills.

### **6062 ARCHITECTURE: 5 credits Grades 10-12**

*Prerequisite: Design Technology*

Students will explore architectural design principles and basic home construction. Students will use the computer to draw floor plans, elevations, framing structures, and pictorial drawings. They will also make technical drawings by hand, as this is a needed skill in the architectural field. Individual and small group projects on interior design fundamentals and home planning will be examined.

### **6212(A-B): INTRODUCTION TO PHOTOSHOP I & II (Fall and Spring): 2.5 credits Grades 9-12**

Students will explore the exciting, cutting-edge world of Adobe Photoshop and all of its capabilities using the latest version of the programs available today in the commercial world. Students develop skills in the areas of photo retouching, manipulation, creating realistic images and working with text. Hands-on tutorials using Photoshop are completed to give a well-rounded basis for *all aspects of digital photo design*. Students can work independently or in small groups during the class. The Fall or Spring course can be taken alone, or both could be taken as a full year course.

### **6222: ADVANCED PHOTOSHOP & GAMING: 5 credits Grades 10-12**

*Prerequisite: Introduction to Photoshop I and II/Teacher Recommendation* The curriculum will encompass an advanced approach to Photoshop in the first semester. Projects will be broader based and use video tutorials as a basis. Students will work individually to complete projects for both the private and public sectors. Photoshop will be used to create game and movie posters as seen on the internet. The second semester will consist of coursework utilizing the program Unity. Minor coding as well as graphic design will be merged into creating their own unique games such as Angry Birds and Duck Shoot. Students will learn step by step methods to create every level of the game which also includes a scoreboard

### **8103: COMPUTER ANIMATION AND WEB DESIGN IV: 5 Credits Grades 11-12.**

*Prerequisite: Advanced Photoshop & Gaming & Teacher Recommendation*

This course will feature maintaining individual projects associated with various websites. All projects are interrelated with techniques and advanced use of computer animation and web design. Student projects will apply learned skills of photoshop and other assorted Adobe programs to support Wake Up Warriors and individual projects.

**6200: COMPUTER SCIENCE 1 (TECH): 2.5 Credits Grades 9 - 12**

*Prerequisite: Prerequisite: 70 and above in Algebra 1 or Geometry*

This course is designed to introduce students to the computer approach to solving problems. The course is highly visual, dynamic, and interactive making it engaging to new coders. The course teaches the foundations of computer science and basic programming, with emphasis on helping students develop logical thinking and problem-solving skills. Students will get "hands on" experience with the computer from the earliest stages of the course.

**6201: COMPUTER SCIENCE 2 – INTRODUCTION TO PROGRAMMING AND APP DEVELOPMENT USING SWIFT AND PYTHON PROGRAMMING LANGUAGE: 2.5 credits**

**Grades 9-12**

*Prerequisite: Algebra I with a final grade of 75 or higher and Computer Science 1*

The course is highly visual, dynamic, and interactive, making it engaging for new coders. The teacher expands upon the foundations of computer science and Python programming in Computer Science 1, with a continued emphasis further developing logical thinking and problem-solving skills. This course includes the advanced concepts of python programming and the Introduction to Swift programming. This is the first course that will provide students with the tools and skills necessary to develop an iOS App from scratch. By the end of the course, students will be able to demonstrate intermediate application of programming in Swift and python.

**6202: COMPUTER SCIENCE 3 (TECH) - APPLE APP DEVELOPMENT WITH SWIFT PROGRAMMING CERTIFICATION: 5 credits Grades 10-12**

*Prerequisite: Computer Science 2 or equivalent, Algebra I with a final grade of 75 or higher, Computer Science 2 and Teacher recommendation.*

App Development with Swift is a full-year course designed by Apple engineers and educators to teach students elements of app design using Swift, one of the world's most popular programming languages. This is a continuation of Computer Science 2, which takes students further, to expand their skills. with Swift, Xcode, and iOS. By the end of the course, students will build a fully functioning app of their own design. This course provides the opportunity to take the Apple Level 1 Swift Certification Exam.

**6203: AP COMPUTER SCIENCE PRINCIPLES (TECH): 5 credits Grades 9 - 12**

*Prerequisite: Algebra I or Geometry with a final grade of 75 or higher, Computer Science 1 with a final grade of 75 or higher, or Teacher recommendation.*

This course introduces students to a broad overview of the field of computer science instilling the ideas and practices of computational thinking, and inviting students to understand how computing changes the world. Students develop, design, and evaluate solutions and then apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into code and use data to discover new knowledge. The coursework and assessments emphasize creativity, problem-solving, collaboration, and communication through written, multimedia, and computer programming.

**6300: INTRODUCTION TO AVIATION: 5 credits Grades 9-12**

Students will learn sketching and basics in orthographic projection, isometric and oblique drawings and one perspective drawings. Students will examine basic layout and design techniques by using a computer-aided drawing (CAD) program for their projects.

**6310: INTRODUCTION TO FLIGHT AND AIRCRAFT SYSTEMS: 5 credits Grades 10-12**

*Prerequisites: Introduction to Aviation and/or Teacher Recommendation.* In the first semester of the Introduction to Flight and Aircraft Systems course, students pursuing the Pilot and UAS tracks will look closely at the aircraft they may one day operate. Students will begin with an exploration of the types of aircraft in use today before learning how aircraft are made and how they fly. Students will understand how aircraft are categorized, be able to identify their parts, and learn about aircraft construction techniques and materials. They will gain an in-depth understanding of the forces of flight—lift, weight, thrust, and drag—including how to make key calculations. They will then touch on aircraft design, looking at stability, aircraft controls, and maneuvering flight. The course will focus on career skills related to these topics. In the second semester, students in the UAS and Pilot tracks will take an in-depth look at the systems that make crewed and uncrewed aircraft work. Beginning with aircraft powerplants and fuel systems, students will learn about the options available and how they affect aircraft design and performance. They will explore other key aircraft systems, including electrical, pitot-static, and vacuum systems. Throughout the course, they will learn about the flight instruments associated with each system and how to identify and troubleshoot common problems. This unit also covers aircraft flight manuals and required aircraft documents. Finally, students will learn about the factors that affect aircraft performance and how to determine critical operating data for aircraft.

**9063: COMPUTER APPLICATIONS I: 2.5 credits Grades 9-12**

This course is designed to help the student master advanced skills in the areas of word processing, spreadsheets, telecommunications, desktop publishing, multimedia production and presentation applications. Emphasis is on data communications and internet research as well as skill development in the integration of software applications and ethical issues pertaining to information systems and information technology careers. Digital citizenship and cybersecurity are reinforced through software applications.

**9064: COMPUTER APPLICATIONS II: 2.5 credits Grades 9-12**

*Prerequisite: Computer Applications I*

This course is designed to help the student master advanced skills in the areas of integrating technology devices, internet research strategies and uses, complex desktop publishing, multimedia production, and basic web page design. Emphasis is placed on skill development and refinement of skills in information technologies as well as economic, ethical, and social issues in information technologies. Digital citizenship and cybersecurity are reinforced through software applications.

## ENGLISH LANGUAGE ARTS

All 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade students are required to enroll in an English 9, 10, and 11, respectively. English is sequential; passing each appropriate grade level is a prerequisite for enrollment in the next course. Those who will be selecting their fourth required year of English for graduation will adhere to the guidelines as follows:

Guidelines for selecting the fourth required year of English

If the student has demonstrated proficiency in Language Arts Literacy instruction, the student may select one of the following options:

- English 12
- English 12 Honors (approval required)
- English 12 Concurrent Enrollment Program (CEP) (approval required) RVCC
- British Literature I & II Dual Enrollment Seton Hall University
- AP Literature and Composition (approval required)

**NOTE:**

1. ELA Essentials are supplemental courses mandated by the State of New Jersey. Students who do not demonstrate proficiency on State/District tests must take these courses.
2. Summer reading is required for all courses needed for English graduation credit.

**1012: ENGLISH 9: 5 credits Grade 9**

Students will participate in this comprehensive course, which is literature-based and ensures that they will experience the full range of language arts: reading, writing, speaking, listening, and media literacy. Students will improve their skills in reading, vocabulary, oral and written language, as they study various themes in different literary genres.

**1011: ENGLISH 9 HONORS: 5 credits Grade 9**

*Prerequisites: Results of standardized testing; performance on the district writing sample; grades in 8<sup>th</sup> grade Language Arts, and teacher recommendation*

Students will participate in the full range of language arts and will be challenged to fully analyze the deeper and more complex uses of language in their literary study. Advanced skills in sentence and paragraph structure and the general mechanics of good writing are emphasized. Students will explore various themes as they read and evaluate selected novels, short stories, biographies, plays, poetry and essays.

**1022: ENGLISH 10: 5 credits Grade 10**

*Prerequisite: English 9 or English 9 Honors*

This course is designed for students who have previously demonstrated grade level abilities in reading and writing. Students will further develop their abilities in reading and critically evaluating poems, plays, essays, short stories, and novels, with a focus on American literature and how it reflects the culture and history of our nation. Instruction in writing will emphasize developing clear and concise prose, language mechanics, vocabulary, and spelling. Other language arts skills in the areas of speaking, listening, and media literacy will be refined and developed.

**1021: ENGLISH 10 HONORS: 5 credits Grade 10**

*Prerequisites: Results on standardized testing, performance on the district writing sample, grades earned in 9<sup>th</sup> grade English, and teacher recommendation*

In this course, students will study, in greater depth, the content and forms of poems, plays, essays, short stories, and novels, with a focus on American literature and how it reflects the culture and history of our nation. Writing skills will be further developed with an emphasis on clarity and conciseness, and advancement in grammatical skills and vocabulary. Presentation and communication skills will be refined through a variety of speaking, listening, and media literacy activities.

**1032: ENGLISH 11: 5 credits Grade 11**

*Prerequisite: English 10 or English 10 Honors*

This course is designed for students who have previously demonstrated grade level abilities in reading and writing. Students will further develop their abilities in reading and critically evaluating poems, plays, essays, short stories, and novels, with a focus on World Literature and how it reflects history and cultures. A variety of traditional and modern literature selections from around the world will be studied, as students learn to compare and contrast different cultures. Students will be provided with instruction in the improvement of writing skills, with the emphasis on developing clear and concise prose, as well as language mechanics, vocabulary and spelling. Students will also practice listening, speaking, media literacy and critical thinking skills through a variety of activities.

**1031: ENGLISH 11 HONORS: 5 credits Grade 11**

*Prerequisites: Results on standardized testing, performance on the district writing sample, grades earned in 10<sup>th</sup> grade English, and teacher recommendation*

In this course, students will study, in greater depth, the content and forms of poems, plays, essays, short stories, and novels with a focus on World Literature and how it reflects history and cultures. A variety of traditional and modern literature selections from around the world will be studied, as students learn to compare and contrast different cultures. Writing skills will be further developed with emphasis on clarity and conciseness, and advancement in grammatical skills and vocabulary development. A variety of activities in speaking, listening, and media literacy will promote critical thinking skills.

**1042: ENGLISH 12: 5 credits Grade 12**

*Prerequisite: English 11 or English 11 Honors*

This course is designed for 12<sup>th</sup> grade students who have previously demonstrated grade level abilities in reading and writing. In this course, students will prepare for post-secondary education and the work world by developing and refining all language arts literacy skills. The course materials focus on British Literature, and students will read and critically evaluate poems, plays, short stories, essays, and novels representative of the classical canon through the modern era.

**1041: ENGLISH 12 HONORS: 5 credits Grade 12**

*Prerequisites: Results on standardized testing, performance on the district writing sample, grades earned in 11<sup>th</sup> grade English, and teacher recommendation*

Students will prepare for the college environment and work world by refining reading, writing, communication, and media literacy skills. The course focus is on the work of British writers, representative of the classical canon through the modern era, and emphasis will be placed on critical evaluation skills and writing effective analyses of British literature.

**1044: ENGLISH 12 CEP I & II: 5 credits Grade 12**

English 12 CEP I is the first in a two-course composition sequence. The central purposes of English Composition I are to develop critical reading and thinking skills and to write thesis-driven, text-based essays. The course takes a process-oriented approach to writing that incorporates prewriting, drafting, reviewing, and revising. Students in English Composition I learn basic research skills and apply them to at least one text-based research essay.

English 12 CEP II is the second in a two-course composition sequence that continues to expand and refine analytical writing and critical reading skills. Students produce a series of documented essays based on a range of fiction and non-fiction sources, focusing on the challenges posed by writing longer essays and using advanced research techniques.

**1170: AP ENGLISH LANGUAGE AND COMPOSITION: 5 credits Grade 11**

*Prerequisites: Results on standardized testing, performance on the district writing sample, grades earned in 10<sup>th</sup> grade English, and teacher recommendation*

This course may be selected by students as their required English course. The purpose of the AP course in English and Composition is to teach students to become skilled readers of prose in a variety of periods, disciplines, and rhetorical contexts. The course will give students practice and helpful criticism necessary to make them flexible writers who can compose in a variety of modes and for a variety of purposes. Students who take AP courses are qualified to take the AP exam. Many colleges and universities grant advanced placement and/or credit for achieving AP exam grades of 3 or higher.

**1250: AP ENGLISH LITERATURE AND COMPOSITION: 5 credits Grade 12**

*Prerequisites: Results on standardized testing, performance on the district writing sample, grades earned in 11<sup>th</sup> grade English, and teacher recommendation.*

This course may be selected by 12<sup>th</sup> grade students as their required English course. The purpose of the AP course in English Literature and Composition is to involve students in both the study and practice of writing and the study of literature. Students will complete in-depth readings of poetry and prose, work on comprehension exercises, and develop thematic analyses of works in all literary genres. Students will conduct survey reading of background material on literary time periods, trends, authors, and movements. Multiple selections by the same author will be read for group projects or for research-based papers. Students in this course are encouraged to take the AP exam. Many colleges and universities grant advanced placement and/or credit for achieving AP exam grades of 3 or higher.

**ENGLISH LANGUAGE ARTS ELECTIVES****1052: JOURNALISM I: 5 credits Grades 9-12**

Journalism I is designed for students who wish to learn the basics of journalism. Students are introduced to the fundamental practices and procedures of effective news reporting, how to gather and organize facts, how to write interesting news copy, and how to meet deadlines. Students will be expected to contribute articles to school publications and to participate on the school newspaper staff.

**1061: JOURNALISM II Honors: 5 credits Grades 11-12**

*Prerequisites: Journalism I and teacher recommendation*

Students will use the concepts and technical skills learned in Journalism I, progressing from teacher-guided instruction to self-directed learning. The focus of this course will be on more sophisticated writing assignments, such as investigative reporting and editorial writing. Students in this class will become more aware of journalism as a career and are encouraged to assume leadership positions on the high school newspaper staff.

**1121: CREATIVE WRITING: 2.5 credits Grades 9-12**

*Prerequisites: Teacher recommendation, demonstrated proficiency reflected by standardized test scores, and successful completion of the previous English courses*

Creative Writing encourages students to discover and develop a distinctive creative voice, through a series of exercises and assignments, as they compile a portfolio of their work. Beginning with shorter exercises, students will progress toward longer and more individualized writing. Students who enroll in this course must be willing to present their work orally to the class.

**1141: GRAPHIC NOVELS & ANIME: 2.5 credits Grades 9-12**

This half-year elective is designed to familiarize students with the graphic novel genre. Students will move through the history and theory of the graphic novel to the study of representative texts.

**1152: SPEECH AND DEBATE: 2.5 credits Grades 10-12**

*Prerequisites: Teacher recommendation and successful completion of the previous year's English course.*

Students enrolled in this hands-on and student-centered course will recognize the meaning in text and practice effective speech skills to communicate that meaning to their classmates. As students learn techniques to facilitate communication, they will utilize effective listening skills for analysis and critique, apply research and writing skills to develop original speeches, and prepare for and conduct formal debates.

**1162: MASS MEDIA: 2.5 credits Grades 11-12**

*Prerequisite: Successful completion of the previous year's English course*

This course is designed to help students understand the ways in which ideas and opinions are communicated through the commercial media. Students will analyze media messages in newspapers, magazines, television, radio, advertising, and film to develop critical thinking skills. Through examination of various types of American media, students will develop an understanding of how media shapes our society.

**1181: SPOKEN WORD POETRY: 2.5 credits Grades 9-12**

A broad designation for poetry intended for performance. Though some spoken word poetry may also be published in the page, the genre has its roots in oral traditions and performance. Spoken word can encompass or contain elements of rap, hip-hop, storytelling, theater, jazz, rock, blues, and folk music. Characterized by rhyme, repetition, improvisation, and word play, spoken word poems frequently refer to issues of social justice, politics, race, and community. Related to slam poetry, spoken word may draw on music, sound, dance, or other kinds of performance to connect with audiences.

**1191: FILM REPRESENTING CULTURE: 2.5 credits Grades 9-12**

This half-year elective will allow students to study film, from its inception through today. Students will learn how to "read movies." Students will relate film to life by engaging in film reviews, film comparisons, and film analysis.

**1260: ELA ESSENTIALS 9: 5 credits Grade 9**

Students will be placed in this course based upon their standardized test scores and other criteria developed by the Franklin Township Public Schools and the New Jersey Department of Education.

This is a required program for 9<sup>th</sup> grade students who have not demonstrated proficiency in the Language Arts Literacy portion of standardized tests and other assessments. With the development of an Individual Student Improvement Plan (ISIP) and both individual and small group instruction, students will strengthen their reading abilities and apply new reading skills in a variety of texts. Through the use of pre-writing, revising, and editing techniques, students will apply new writing skills in a variety of writing activities. **The 5 credits received for passing these courses does not meet the graduation requirement for English but will count toward elective credit.**

**1270: ELA ESSENTIALS 11/12: 2.5 credit Grades 11-12**

Students will be placed in these courses based upon their standardized test scores and other criteria developed by the Franklin Township Public Schools and the New Jersey Department of Education. *This is a required program for 11<sup>th</sup> and 12<sup>th</sup> grade students who have not demonstrated proficiency on the Language Arts Literacy portion standardized tests. These courses will build the students' confidence and skills in written expression and reading ability. An Individualized Student Improvement Plan (ISIP) is developed for each student. **The 2½ credits received for passing these courses does not meet the graduation requirement for English but will count toward the elective credit.***

*\*Note:* Exceptions to any of the above must have approval of the Supervisor of Secondary Language Arts.

## FINE VISUAL AND PERFORMING ARTS

### **8016: ART 1A: 2.5 credits Grades 9-12**

Art 1A provides an introduction to the art elements, design principles, media and processes used to create original artwork for students who express an interest in art. The course will include experiences in drawing techniques, color theory and painting experiences related to Modern Art and other periods of traditional and non-traditional artistic expression. Still life, shading, painting, and career studies are part of this class. Art 1A will stress two-dimensional work. This course is open to any student interested in exploring the many career opportunities in art and related fields as well as those interested in personal expression through the medium of art.

### **8017: ART 1B: 2.5 credits Grades 9-12**

*Prerequisite: Art 1A*

This course is a continuation of the sequential art program for students who have demonstrated successful achievement in the Art 1A class. Refinement of concepts and techniques introduced during Art 1A, as well as the use of varied art media and introduction of new projects, will be included in the course of study. In addition to the focus on 2-dimensional work like perspective drawing and portraits, students will have an opportunity to explore a 3D project and printmaking.

### **8021: ART II HONORS: 5 credits Grades 10-12**

*Prerequisites: Art 1A and Art 1B or teacher recommendation*

This course is designed to provide students with an opportunity to continue to build upon the skills and knowledge gained during their first-year art course. Students will be solving visual art and creative thinking problems in both two and three dimensions. In-depth studies in drawing techniques, color theory and painting, printmaking processes, collages, and sculpture are designed to give experiences applicable to college and career situations. An art gallery experience or museum visit may be part of this course. Student artwork may be selected for exhibit in the District-Wide Youth Art Month Festival and the County Teen Arts Festival.

### **8020: INTRODUCTION TO JEWELRY AND METALWORKING: 2.5 credits Grades 9 - 12**

Students will learn the beginning techniques for jewelry and metalsmithing. The course will include experiences in beading, clay creation, wire wrapping, sawing, texturizing, and polishing. Also, the course will explore the history/origin of jewelry and its growth into a trending profession. This course is open to any student interested in exploring the many career opportunities in jewelry design.

### **8022: JEWELRY AND METALWORKING II: 2.5 credits Grades 9-12**

*Prerequisite: Introduction to Jewelry and Metalworking*

Students will continue to develop and enhance their creative thinking as well as their technical skills and knowledge of tools and materials for jewelry making. Students will also explore in-depth studies in wire, metal, enameling, and glass fusing that are designed to give experiences applicable to college and career situations. Student artwork may be selected for exhibit in the District Wide Youth Art Month Festival and the County Teen Arts Festival.

### **8024: JEWELRY AND METALSMITHING III: 2.5 credits Grades 10-12**

*Prerequisite: Introduction to Jewelry and Metalworking & Jewelry and Metalworking II*

Students will continue to develop and enhance their creative thinking as well as their technical skills and knowledge of tools and materials. They will enrich their understanding of wire, metal, enameling, precious metal clay, and glass fusing. The final project in this class will be to design/create three pieces for a portfolio that will represent the culmination of the student's learning while displaying their personhood/identity. Student artwork may be selected for exhibit in the District- Wide Youth Art Month Festival and the County Teen Arts Festival.

**8026: JEWELRY AND METALSMITHING IV: 2.5 credits Grades 10-12**

*Prerequisite: Introduction to Jewelry and Metalworking, Jewelry and Metalworking II, Jewelry and Metalsmithing III, and a teacher recommendation*

Students will be given the opportunity to refine and enhance their metalsmithing skills including fold forming, hollow fabrication, bezel setting, and advanced soldering. The final “project” in this class will be to design/create an exhibition of work and a portfolio suitable for career or college placement. An art gallery experience or museum visit may be part of this course. Student artwork will be exhibited in both the Teen Arts and District-Wide Youth Art Month Festivals.

**8031: ART III HONORS: 5 credits Grades 11-12**

*Prerequisite: Art II Honors or teacher recommendation*

Third year students will continue to develop and enhance their creative thinking ability as well as their technical skills and knowledge of tools and materials. They will enrich their understanding of two-dimensional art through a deeper exploration of shape, value, color, texture, and pattern. They will improve compositional ability through better understanding of contrast, balance, alignment, repetition, and movement. Enrichment of three-dimensional artwork will come through the exploration of shape and form. An art gallery experience or museum visit may be part of this course. Student artwork will be exhibited in both the Teen Arts and District-Wide Youth Art Month Festivals.

**8041: ART IV HONORS: 5 credits Grade 12 only**

*Prerequisite: Art III Honors or teacher recommendation.*

Fourth year art students will have the opportunity to review the art elements and design principles as a foundation for a personal evaluation of their own strengths and weaknesses as artists. Opportunity will be given during the first semester to refine and enhance areas that students have identified for growth. In the second semester, the students will develop their own creative abilities in two areas/media of their own choosing. Each student will develop an exhibition of work and a portfolio suitable for career or college placement. An art gallery experience or museum visit may be part of this course. Student artwork will be exhibited in both the Teen Arts and District-Wide Youth Art Month Festivals.

**8052: COMMERCIAL ART 1: 5 credits Grades 9-12**

Entry level students will learn the relationship between the fine arts and commercial art in the disciplines of graphic design, digital illustration and photography. They will be introduced to the skills, techniques and tools used in “introductory” level graphic design, digital illustration and photography as well as the many career opportunities available in those industries. Class projects will include creating original logo design, advertisements, brochures, package design, posters, portraiture, digital illustration and other photographic formats. Introductory layout, typography and design development as well as photographic image creation and manipulation will be explored using the latest in design and editing computer software in a state-of-the art computer lab. The uses of illustration, photography and video will also be studied along with the roles of marketing in the visual arts and communications industries.

**8062: COMMERCIAL ART 2: 5 credits Grades 10-12**

*Prerequisite: Commercial Art 1 or teacher recommendation based on portfolio review*

Second year students will study the skills, techniques, and tools used in the professional graphic design, digital illustration, and photography industries to the “intermediate” level. Class projects will include original, full-scope advertising campaigns, corporate identity collateral, environmental graphics, outdoor signage and intermediate level photographic projects including photojournalism and commercial photography. Students will have the opportunity to create “real” advertising campaigns to be used by the department, school and/or township. Further exploration of layout, typography, design development, digital illustration, and photography will provide students with an opportunity to create visual collateral for district and school-wide events as well as the adaptation of two-dimensional designs for television.

**8063: COMMERCIAL ART 3: 5 credits Grades 11-12**

*Prerequisites: Commercial Art 2 or teacher recommendation based on portfolio review*

Third year students will study the skills, techniques, and tools used in the professional graphic design, digital illustration, and photography industries to the “advanced” level. This course will focus on advanced projects geared toward furthering the technical skills and creative effectiveness of the graphic design,

digital illustration, and photography student. An advanced level of computer graphics programs and applications will be studied with an emphasis on personal expression, concepts of real-world “client interface” and regular in- class pursuit of “live” projects in the disciplines of graphic design, digital illustration, and photography. Additionally, portfolio development for art school entrance reviews and future career employment opportunities will be addressed.

**8064: COMMERCIAL ART 4: 5 credits Grade 12 only**

*Prerequisites: Commercial Art 3 or teacher recommendation based on portfolio review*

This course is designed for advanced graphic design, digital illustration, and photography students and will provide the opportunity to develop cutting-edge, creative design concepts through advanced creative-thinking and creative problem-solving skills as well as the mastery of technical skills in these disciplines. Advanced projects and tutorials will be geared toward creating exemplary portfolio pieces. Practical skills and experience will be developed by working on many “live” projects as may be requested from sources outside the classroom. This class is for students who wish to excel in these subject specialties and/or who may be considering a visual art school toward a career in graphic design, digital illustration, advertising, interactive design, photography and/or other aspects of the creative arts and visual communications industry.

**8072: DIGITAL CAREERS: 5 credits Grades 9 -12**

*Prerequisite: Computer Applications course at FMS or FHS.*

This is an integrated program for special needs students to partner with general education students. Beginning Digital Careers students will learn the skills, techniques and computer applications used at the introductory level graphic design, photography and print production. Students will be introduced to these skill sets as pathways to careers in these disciplines with a focus on print production. Basic entrepreneurship will be an integral part of the course as the class begins to create the business of an operating print shop in the school community. Class projects will cover 3 categories: 1. Design: students will create designs for flyers, posters, banners, locker decals, protective laptop skins, etc. 2. Print production: students will operate printer software and hardware to produce the designs created in class. 3. Business: students will employ business marketing and advertising, finance, customer service and order fulfillment in the selling of their products in the school marketplace. The course will provide the experience of developing marketable skills and products, servicing the needs of a customer base, starting and maintaining a successful business.

**8082: DRAWING: 2.5 credits Grades 9-12**

This course will cultivate the idea that drawing is a skill that can be achieved by most students. A variety of techniques, styles, and materials will be explored including: blind, quick and modified contour drawing, value studies, and figure drawing, using typical materials such as pencil, conté crayon, pen and ink, pastel, scratchboard, charcoal, and mixed media.

**8092: SCULPTURE I: 2.5 credits Grades 9-12**

In Sculpture 1 the concepts and processes of three-dimensional work are explored. Basic sculpture techniques such as carving, modeling, and assemblage are investigated. A wide array of media and tools are used. Historical and cultural aspects of sculpture are explored. A strong emphasis will be placed upon visual thinking and creative problem solving. All students will have an opportunity to have their work displayed during the District - Wide Youth Art Month Festival.

**8095: SCULPTURE II: 2.5 credits Grades 9-12**

*Prerequisites: Sculpture I and/or teacher recommendation*

Students will have an opportunity to expand on techniques in three-dimensional work encountered in Sculpture I. More advanced concepts are explored and a wide array of methods, media and tools employed. Media may include, but is not limited to paper, wood, clay, cardboard, plaster, wire, metal, and found objects. Methods include casting, modeling, carving, assemblage, and others. As this is an advanced course, scale will play a large role in student work. An emphasis will be placed on visual thinking, creative problem solving, and the critique process. History/culture will be taught in every lesson. All students will have an opportunity to have their work displayed during the District-Wide Youth Art Month Festival.

**8096: ADVANCED SCULPTURE STUDIO: 2.5 credits Grades 10-12**

*Prerequisite: Sculpture II Students in Advanced Sculpture Studio will build upon the skills obtained in Sculpture I and II.*

Since students have already gained a depth of experience from two previous sculpture classes, they will now have the opportunity to choose one or two techniques on which they would like to focus. Projects will be designed to suit the individual needs and interests of each student. Materials and techniques will therefore differ from student to student. At least one project will be geared toward exhibition in a public venue. Therefore, scale will play a crucial role in the work. All students will have an opportunity to have their work displayed during the District-Wide Youth Art Month Festival.

**8100: CARTOONING & ANIMATION I: 2.5 credits Grades 9-12**

The course will explore the concepts of cartooning and sequential art. Students will learn the skills needed to design and develop an original cartoon character and a storyline in which this character could be involved. They will learn layout and production techniques for sequential art and visual storytelling that will allow them to express their ideas in a personal and an aesthetic manner while gaining insight into the career of a professional cartoonist/comic book artist.

**8101: CARTOONING & ANIMATION II: 2.5 credits Grades 9-12**

*Prerequisite: Cartooning and Animation I*

This course is designed as an extension to the Cartooning and Animation I course providing an opportunity for students to access introductory computer animation experiences. The development of skills and technical applications related to computer graphics and animation will present students with an overview of professional career requirements and opportunities in this growing and exciting field.

**8140: BEGINNER CERAMICS: 5 credits Grades 9-12**

This course is designed as an introduction to design and art with a focus on 3D media using ceramics. Students will learn the three major hand-building techniques: slab, coil, and the pinch method. Basic glazing techniques and firing procedures will be introduced. This course will expand students' understanding of concepts and techniques used in ceramic construction. Students will further develop technical and creative skills in the production of individual works of art reflecting personal imagery. Exposure to recognized artists and masterworks in 3D related to ceramics will be provided as well as the use of the critique process for self-assessment. Students will have the opportunity to participate in both county and state exhibitions.

**8142: ADVANCED CERAMICS: 5 credits Grades 10-12**

*Prerequisite: Beginner Ceramics and teacher recommendation is required.*

This course is a continuation of Beginner Ceramics and intended to further develop technical skills in 3D art using the media of clay. Students with a serious interest in Ceramics will have the opportunity to further refine technical and aesthetic skills while fostering critical thinking. Individual project design provides students with the opportunity to explore creative problem solving and students will be able to choose their method of working which may include hand-building, wheel throwing, or a combination of both. Individual self-expression and exposure to the works of great masters will stimulate creative exploration. Students will create work on a much larger scale as well as focus on an art portfolio, if needed. Opportunity is provided for the display of student artwork at school, county, and state exhibitions.

**8185: MURALS & MOSAICS: 5 credits Grades 11-12**

*Prerequisite: Advanced Ceramics and teacher recommendation*

This course provides an advanced level of individualized instruction to meet specific interests of students who wish to continue their studies beyond the Advanced Ceramics curriculum. Students will work independently on murals to beautify the school and create projects based on prior knowledge and skills. They will be introduced to the history of mosaic art, overview of different materials and techniques, use of mosaic making tools, working on personal projects, as well as building mural designs using glass and/or paint.

**8194: 3D COMPUTER GRAPHICS I: 2.5 credits Grades 10-12**

*Prerequisites: Art 1A and Art 1B, Commercial Art I, or teacher recommendation*

Students learn concepts and techniques of 3D animation used in the video-gaming, television, film, design, and internet industries. Using professional computer graphics technology, students learn how to construct 3D objects, texture and color the 3D objects, light the scene, and animate the 3D objects. Critical thinking and design skills will be developed as students conceive and execute their projects.

**8195: 3D COMPUTER GRAPHICS II: 2.5 credits Grades 10-12**

*Prerequisites: 3D Computer Animation I or teacher recommendation*

This is a continuation of 3D Computer Animation I for students to explore more advanced and complex 3D computer graphics animation techniques and projects.

**8623: AP ART HISTORY: 5 credits Grades 10-12**

*Prerequisite: A demonstrated interest and practice in the visual arts and history through the completion of three semesters of a visual arts/history class supported by a visual arts/history teacher recommendation.* This class covers material in the breadth and depth of a college level Introduction to Art History class. Prehistoric to contemporary art from a variety of cultures will be studied. By examining art of different civilizations and periods students will learn about the political, economic, and cultural forces at work shaping human history. Students will gain insight into the aesthetic and psychological underpinnings of visual art. This class prepares the student to take the AP Art History exam offered by the College Board.

## DANCE

*\*CTE Dance Track = Placement audition as an incoming freshman. Dance will remain in your schedule for all four years of high school. This track is for students interested in pursuing dance in college or as a professional career.*

**8343A: TECHNIQUE 1 CTE: 5 credits Grade 9**

Technique 1 is the first level dance course in the CTE/CEP Dance Track. Students must have a substantial foundation of ballet and modern technique. In addition to technique training, the following topics will be introduced: health and wellness, dance production, teaching methods and professional dance company tasks such as facilitating auditions, marketing, and fundraising. Improvisation and choreography skills will be explored. All students will be required to perform in the spring dance concert as their final exam for the course.

**8343B: TECHNIQUE 2 CTE: 5 credits Grade 10**

Technique 2 is the second level dance course in the CTE/CEP Dance Track. Students must have a substantial foundation of ballet and modern technique. In addition to technique training, the following topics will be further developed: health and wellness, dance production, teaching methods, and professional dance company tasks; such as facilitating auditions, marketing, and fundraising. Improvisation and choreography skills will be developed. All students will be required to perform in the spring dance concert as their final exam for the course.

**8343C: TECHNIQUE 3 CTE: 5 credits Grade 11**

Technique 3 is the third level dance course in the CTE/CEP Dance Track. Students must have a substantial foundation of ballet and modern technique. In addition to technique training, the following topics will be further developed: health and wellness, dance production, teaching methods and professional dance company tasks, such as facilitating auditions, marketing, and fundraising. Improvisation and choreography skills will be refined. All students will be required to perform in the spring dance concert as their final exam for the course.

**8389: THE COMPANY HONORS CTE: 5 credits Grades 12**

*Prerequisite: Technique 1, 2, 3*

The Company is the highest-level dance course. Students must have fulfilled a prerequisite of three consecutive years of dance classes in the Franklin High School Dance Program. This course is meant to highly prepare students to embark on a successful professional career in dance. Students must have a substantial foundation of modern technique, choreography, performance, critique and history. These topics will continue to be explored on an advanced level along with knowledge in health and wellness, dance production, teaching methods, and real- world company tasks; such as facilitating auditions, marketing, and fundraising. Multiple collaborations with professional guest artists will be arranged for this course. The Company will partake in a District Tour where they will perform and mentor students in the district. Students will be eligible to become members of the National Honors Society in Dance. Students in this class will be eligible for Career and Technical Education (CTE) certificate upon passing an industrial standardized assessment as well as a performance exam. Also, they may be eligible to receive college credit for the course at a discounted rate through Raritan Valley Community College. These credits may be transferable to other universities for up to two years upon graduation from Franklin High School.

**NON-CTE/CEP Dance Track****8302: BEGINNER DANCE: 2.5 credits Grades 9-12**

*Prerequisites: None*

This course will provide students with dance aptitude an opportunity to receive basic training in a variety of dance styles. Techniques in ballet, modern, and jazz dance will be covered. Other dance styles such as hip-hop and multicultural forms may be included. Students will learn basic choreographic elements and have the opportunity to create their own dances. Basic dance history and dance critique skills will also be studied in this Beginner Dance course. Beginner dancers will need to change into comfortable clothes for class in order to move properly. There is no performance for this course. Final exam will be a written exam.

**8303: INTEGRATED DANCE: 5 credits Grades 9 -12**

This new course will provide an inclusive movement class for students with and without disabilities to partner together. Focus will be on the elements of dance: body, energy, space, time and relationship. Multiple props will be included to provide visual and tactile feedback as well as musical exercises. This course is process oriented. Dance performances will not be required. Clothing should be comfortable to move in and sneakers should be worn.

**8310: INTERMEDIATE DANCE: 5 credits Grades 9-12**

*Prerequisites: Beginner or by audition in January*

Intermediate techniques in ballet, modern, and jazz dance will be covered. Other dance styles such as hip-hop and multicultural forms may be included. Students in Intermediate Dance will be given the experience in the process of creating original choreography, learning dance history and dance critique skills. All students will be required to perform in the spring dance concert as their final exam for the course.

**8312: HONORS ADVANCED DANCE: 5 credits Grades 9-12**

*Prerequisites: Intermediate or by audition in January*

Students in this course must demonstrate advanced technique in ballet, modern, and jazz. Other dance styles; such as hip-hop and multicultural forms, may be included. Honors Advanced Dance students are required to audition their original choreography for both the winter and spring dance concerts. Dance

history, health and wellness, as well as, dance critique will be covered in this course. Students in Honors Advanced Dance will be eligible to become members of the National Honors Society in Dance. All students will be required to perform in the spring dance concert as their final exam for the course.

**8314: BOYS DANCE: 5 credits Grades 9-12**

*Prerequisites: By recommendation or audition only.*

This course is for all boys who have prior dance experience and will continue training in a variety of styles. Choreography, critique, dance history, as well as health and wellness will be covered in this course. All students will be required to perform in the spring dance concert as their final exam for the course.

## DRAMA

**8642: INTRODUCTION TO DRAMA: 5 credits Grades 9-12**

This is an introductory course that will give students an opportunity to explore the basics of acting. The focus of the training will be on establishing a strong base for continued study of acting, and a broad understanding of the art form; its history, various approaches and styles, formal structure, and opportunities and requirements. Training will focus on developing skills in speech and projection, improvisation, use of the body, and approaches to characterization. Students will be given experience in the process of creating original characters, scene study, mask, critiquing, speech for stage, and the history of acting.

**8645: DRAMA II: 5 credits Grades 10-12**

*Prerequisites: Introduction to Drama and teacher recommendation or placement by audition*

This is a second level course designed to build upon the foundations developed in previous drama classes. Emphasis will be placed on improving students' acting skills, including the areas of speech, projection, use of the body, script analysis, theater terminology, understanding the process of critique, improvisation, approaches to characterization, audition techniques and the study of acting as a profession. Students will have an opportunity to become familiar with a variety of dramatic and comedic literature, both through individual and ensemble work, learn about overall theatrical production, and participate in stage performance, including showcases, competitions, and festivals. In addition to goals for performance, historic and cultural contexts of theatrical production will be studied.

**8647: DRAMA III: 5 credits Grades 11-12**

*Prerequisites: Drama II & teacher recommendation or placement by audition*

This is an advanced class with an emphasis on refining skills in acting both individually and in ensemble. The development of technical skills in the areas of voice and projection, use of the body, script analysis, characterization, improvisation, stage movement, preparation for career, and the audition process will be covered in great depth. Students will increase their knowledge of, and experience, with a greater range of dramatic and comedic literature from a variety of playwrights and historic time periods. Experience in both performance and in overall stage production will be covered via showcases, competitions, special productions, and festival participation. In addition, students will become proficient in the process of self-critique and critique of others.

**8648: DRAMA IV: 5 credits Grade 12**

*Prerequisites: Drama III and teacher recommendation or placement by audition*

This advanced level drama course is designed for students with a serious focus on pursuit of theatrical skills. The emphasis is on refining knowledge of acting theory and techniques and solidifying individual student approaches to the art and craft of acting. Experience with both individual and ensemble work will be extended, culminating in both self/students directed solo and ensemble pieces and teacher directed large scenes or plays. Preparation for auditions and career pursuits will be covered in great depth. Students will continue to extend knowledge of, and experience, with a greater range of dramatic and comedic literature from a variety of playwrights and historic time periods. Students will demonstrate advanced skill in the areas of self-critique and the critique of others. Experience in both performance and in overall stage production will be covered via showcases, competitions, special productions, and festival participation.

**8388IS: INDEPENDENT STUDY: DIRECTING: 5 credits Grade 12**

*Prerequisites: Placement by teacher and administrator recommendation*

This is an advanced level of individualized instruction tailored to meet specific interests and course needs not addressed in the general drama program. Students are given the opportunity to direct drama students in publicly performed pieces with sets, lights, and costumes. The course requires mutual arrangement between the student, teacher, and administrator. An Independent Study Contract must be signed by the student, parent/guardian, and teacher and submitted to the Counseling Department. This must be done prior to registering for this course. The students will be assigned to work with Drama 2, 3 or 4.

**8643: MUSICAL THEATER: 5 credits GRADES 10-12**

*Prerequisites: 1 year of either voice, drama or dance and teacher recommendation.*

This is a course for the serious voice, dance or theatre student wishing to pursue a rigorous training in the genre of American Musical Theatre and learn the history of the American Musical in the musical theatre. Emphasis will be placed on individual technical skill as well as ensemble in all three components, voice, dance and acting. Students will be coached on musical theatre audition techniques for college preparation as well as the professional world

**MUSIC**

Select Ensembles Small and specialized extracurricular ensemble experiences are available in addition to the course options listed in this guide for students participating in the Music Department's curricular programs. Select ensembles meet after school, and/or evenings. Student eligibility is determined by an audition and teacher recommendation.

*Brass Ensemble*

*Jazz Band*

*Chamber Strings*

*The Madrigal Singers*

*Singers Spring Musical/Pit Orchestra*

*Fall Drama*

*Marching Band*

*Percussion Ensemble*

**Band Options**- Freshman Band/Symphonic Band/Wind Ensemble the Band programs are designed to provide instruction on all standard instruments related to a Band ensemble advancing students' skills in technical mastery and musical expression. As students commit to being a part of a performance organization, participation in evening concerts, participation in weekly lessons, as scheduled, in addition to class requirements, is expected.

**Marching Band Honors Credit Option**- Band students who opt for and successfully complete the Marching Band component of the program in addition to the standard requirements will receive "Honors" credit. The Marching Band Season runs from September through mid-November, plus several spring parades/events.

8509: FRESHMEN BAND: 5 credits

8510: FRESHMEN BAND HONORS/MARCHING BAND: 5 credits

Grade 9 Prerequisites: 8th Grade Band or teacher recommendation

8513: SYMPHONIC BAND: 5 credits

8514: SYMPHONIC BAND HONORS: 5 credits

Grades 10-12 Prerequisites: Freshmen Band or teacher recommendation

8515: WIND ENSEMBLE: 5 credits

8516: WIND ENSEMBLE HONORS: 5 credits

Grades 10-12 Prerequisites: Audition/teacher recommendation Auditions will be held during the second semester of the preceding school year, prior to the completion of the student course selection process.

\* Please note that there is no provision for half-year participation and no "Marching Band Only" option.

**8521A: CONCERT CHOIR HONORS: 5 credits Grades 9-12**

*Prerequisite: Placement by audition or teacher recommendation*

This elective is a select group of Soprano, Alto, Tenor, and Baritone (SATB) singers, whose high choral audition scores merit placement in this serious choral group. The music literature will be of a high caliber. The Concert Choir will perform for school and community functions as well as choral competitions. Rehearsals occasionally are held after school for performance preparation. Participation in the in-school choir program is a prerequisite for students who may wish to audition for the select extra-curricular, acapella vocal ensemble: The Madrigals Singers.

**8542A: VOICE CLASS: 5 credits Grades 9-12**

This is a full year elective for students who wish to learn more about the voice and voice production. Emphasis will be placed on vocal technique, sight singing and expanding vocal repertoire for each student. This is a solo-based performance class.

**8531: FRESHMEN ORCHESTRA: 5 credits Grade 9**

*Prerequisites: 8th Grade Orchestra or teacher recommendation*

This course is designed to provide instruction on the four basic orchestral string instruments: violin, viola, cello, and string bass. Students will have the opportunity to develop their skills through a range of challenging technical exercise routines and performance literature. As a prerequisite to Orchestra Honors, students must demonstrate successful completion of all Freshmen Orchestra requirements to move on to the more advanced ensemble. As a performance organization, participation in scheduled evening concerts and weekly lessons, in addition to regular class requirements, is expected.

**8532: ORCHESTRA HONORS: 5 credits Grades 10-12**

*Prerequisites: Freshman Orchestra, teacher recommendation and/or audition*

This course is designed to provide intermediate/advanced instruction on the four basic orchestral string instruments: violin, viola, cello, and string bass. Students will have an opportunity to further develop string instrument techniques and skills through a range of challenging technical exercise routines and performance literature. Students can expect to perform several times throughout the year for evening concerts and school functions in addition to trips and festival participation. They may opt to audition for the extracurricular String Chamber Ensemble, a select string ensemble. As a performance organization, participation in scheduled evening concerts and weekly lessons, in addition to regular class requirements, is expected.

**3532A: ORCHESTRA SYMPHONIC HONORS: 5 credits Grades 11-12**

*Prerequisites: Freshman Orchestra, Orchestra Honors, teacher recommendation and/or audition.*

This course is designed to provide advanced instruction on the four basic orchestral string instruments: violin, viola, cello, and string bass. Students will have an opportunity to further develop string instrument techniques and skills through a range of challenging technical exercise routines and performance literature. Students can expect to perform several times throughout the year for evening concerts and school functions in addition to trips and festival participation. They may opt to audition for the extra-curricular String Chamber Ensemble, a select string ensemble. As a performance organization, participation in scheduled evening concerts and weekly lessons, in addition to regular class requirements, is expected.

**8552: GUITAR I: 5 credits Grades 9-12**

Guitar 1 is a full year classical guitar-based performance course where students will learn basic music theory, perform fingerstyle melodies, and chords. Students will also learn and develop skills needed to perform, both individually, and as a small ensemble in class on a daily basis. This course is designed to develop students to be members of the FHS Guitar Ensemble.

**8562: GUITAR II: 5 credits Grades 10-12**

*Prerequisite: Guitar I, audition & teacher recommendation.*

Guitar II is a full year classical guitar-based performance course for students who have successfully completed Guitar One, passed an audition, and also having been recommended by the teacher. Students will expand skills in music reading, performing melodies and chord studies, both individually, and as members of an ensemble. Students who are accepted into Guitar II are required to be members of the FHS Guitar Ensemble. As a performance organization, participation in scheduled evening concerts, in addition to regular class assignments is expected.

**8572: GUITAR III HONORS: 5 credits Grades 11-12**

*Prerequisite: Guitar II, audition, & teacher recommendation.*

This is a course for students who have successfully completed Guitar II, passed audition requirements, and have been recommended by the teacher. This course will focus on classical guitar performance, 2nd-5th position scales, and position chords (major and minor). Students will expand ability in finger-style technique, individually and as members of an ensemble. Students who are accepted into Guitar III course are required to be members of the FHS Guitar Ensemble. As a performance organization, participation in scheduled evening concerts, in addition to regular class assignments is expected.

**8581: JAZZ AND CLASSICAL GUITAR HONORS: 5 credits Grades 11-12**

*Prerequisite: Guitar III, audition, & teacher recommendation*

This is a full year course for students who have successfully completed Guitar III Honors, passed an audition, and have been recommended by the teacher. Students in this course will study 2nd through 7th position playing, and barre chords (major, minor and 7th chords). This course will cover the development of jazz and classical styles and skills for performance. Students will concentrate on the specialized aspects of solo and ensemble literature for Jazz and Classical Guitar styles. Students who are accepted into Jazz/Classical courses are required to be members of the FHS Guitar Ensemble. As a performance organization, participation in scheduled evening concerts, in addition to regular class assignments is expected.

**8583: MUSIC KEYBOARD I: 2.5 credits Grades 9-12**

This course is designed as an introduction to music keyboard skills and requires no previous experience. Students will have the opportunity to work at their own individual electric keyboard station as they explore the musical elements of rhythm, melody, and harmony. As a non-performance music elective, aspects of keyboard playing techniques, concepts of music theory, and literature from the classics to styles that are contemporary will be explored in a comfortable and relaxed environment.

**8584: MUSIC KEYBOARD II: 2.5 credits Grades 9-12**

*Prerequisite: Music Keyboard I or teacher recommendation*

This course is designed for students with a basic knowledge of the piano. Opportunity for improved facility with regards to reading, technique, repertory, and music theory will be provided. Recognized work of noted composers and performers will be introduced and include the varied styles of classical, ragtime, folk, jazz, and rock. As a non-performance music elective, acquisition of increased skills and knowledge is developed through a balance of self-discipline and exploration.

**8585A: PIANO HONORS: 5 credits Grades 9-12**

*Prerequisites: By audition and teacher recommendation*

Students will study piano performance rooted in a traditional curriculum through solo and ensemble literature with a focus on technique, sight-reading, and performance practices. Students will be given the opportunity to explore diverse styles including classical, pop, R&B, blues, ragtime, jazz, boogie, and Broadway. As a performance-based class, students will be expected to perform in several public and private venues as soloists and/or ensemble players.

**8586A: ADVANCED PIANO: 5 credits Grades 9-12**

*Prerequisites: Piano I Honors, audition, and teacher recommendation*

This course is designed to be a continuation program for students who wish to further develop their technical and performance skills on piano. More advanced literature will be studied based on each student's individual ability level. As in the Piano I Honors course, daily practice and public performance are critical components of this program.

**8622: AP MUSIC THEORY: 5 credits Grades 10-12**

*Prerequisite: Teacher recommendation*

This course is designed for students considering the pursuit of advanced study in the field of music. A focus on aural skills (sight-singing, harmonic/melodic dictation), functional harmony, tonal relationships, concepts related to standard rhythms and meters, phrase structure, and form analysis will be covered. Students will read, notate, compose, perform, and listen to music, synthesizing all the fundamentals necessary to understanding the structure of music. Students are encouraged to take the AP Music Theory Exam, which may yield college credit.

*\*CTE Aspects of Video Track = Placement for all incoming sophomores who have taken Intro to Aspects of Video and have been recommended by their teacher to enroll in the Aspects CTE program. CTE Aspects will remain on the students schedule for all three years of high school. This track is for students interested in pursuing television and film in college or as a professional career.*

## TELEVISION PRODUCTION

### Courses offered in the CTE ASPECTS OF VIDEO TRACK

*CTE Aspects of Video Track = CTE Aspects program is a three year commitment beginning in the 10th grade and will end their senior year earning them six college credits through Raritan Valley Community College. This Career and Technology track is for students interested in pursuing television and film in college or as a professional career. CTE students will also complete 20 hours of work-based learning experiences giving them opportunities to network and connect with professionals in the television and film industry while gaining real world experiences.*

**8201: CTE TRACK: ASPECTS OF VIDEO PRODUCTION I: 5 credits Grade 10**

*Prerequisites: Introduction to Aspects of Video and teacher recommendation*

This course will acquaint students with the technical and aesthetic concepts involved in television/film production. Students will develop technical skills through a series of in-class exercises and video projects with emphasis on single camera shooting, scripting, storyboarding, and the basic fundamentals of non-linear editing. The course requires students to work in a cooperative learning environment that provides leadership opportunities and technical skills, while working on group projects.

**8202: CTE TRACK: CTE ASPECTS OF VIDEO PRODUCTION II: 5 credits Grades 11**

*Prerequisites: CTE Aspects of Video Production I*

This CTE course is designed to use advanced journalism/video/film techniques; including scriptwriting, videography, and editing to create mini documentaries, features, student profiles and short independent films. Student videos will address a variety of issues and topics that are relevant in today's society. Students will be required to work in cooperative learning environments and demonstrate advanced technical skills in shooting and editing. Students must demonstrate leadership skills while managing others and the ability to meet deadlines. Each CTE Aspects student will begin their completion of 20 hours of work-based learning experiences and participate in a series of Master classes taught by professionals in the field of study.

**8203: CTE TRACK: CTE ASPECTS OF FILM & TELEVISION (WANT&TV)****5 credits Grades 12**

*Prerequisites: Aspects of Video I and II*

This course provides the opportunity for students to produce, direct, and host a weekly livestream broadcast on various social media platforms. This class gives the students the ability to demonstrate their advanced technical skills in a work-based learning experience that is similar to working in an actual television studio. Students will assume job responsibilities to prepare them to embark on a successful professional career in broadcasting and television production. While in the program the students will be exposed to various Master classes taught by broadcast professionals and have the opportunity to complete their 20 hours of work-based learning experiences. At the completion of the course students will have the opportunity to become certified in Adobe Premiere Editing software and earn 6 college credits from Raritan Valley Community College.

**NON-CTE: Aspects of Video Production TRACK****8151: INTRODUCTION TO ASPECTS OF VIDEO: 5 credits GRADES 9**

This is an introductory course designed for students starting to study Aspects of Video Production. Students will learn film history as well as the fundamentals of film production through film theory. Students will study film structure, cinematography, sound in film and how each relates to different genres. Students will be given the opportunity to explore media beyond film including television, radio and social media as well as identifying its impact on society. The course dives in depth to all of the elements of pre- production before entering Aspects of Video I.

**8153: ASPECTS OF VIDEO PRODUCTION II: 5 credits Grades 11-12**

*Prerequisites: Aspects of Video Production I or by teacher recommendation only*

This course is designed to use advanced journalism/video/film techniques; including scriptwriting, videography, and editing to create mini documentaries, features, student profiles and short independent films. Student videos will address a variety of issues and topics that are relevant in today's society. Students will be required to work in cooperative learning environments and demonstrate advanced technical skills in shooting and editing. Students must demonstrate leadership skills while managing others and the ability to meet deadlines.

**8150: DIGITAL MEDIA WORKSHOP: 5 Credits (Grades 10-12) Pending Board Approval**

This class is designed to create a foundation that supports the technical and the creative processes of various video, audio, and digital media creation including film studies, post production editing audio production and social media/podcasting.

**8632: SOUND STUDIO: 2.5 credits Grades 9-12**

This semester elective will have students learn how to create their own original songs through individual and group collaborations. Songs, music and lyrics will be created through the use of electronic platforms and will be recorded. Upon successful completion of the required coursework, students will be able to operate equipment found in authentic sound studios.

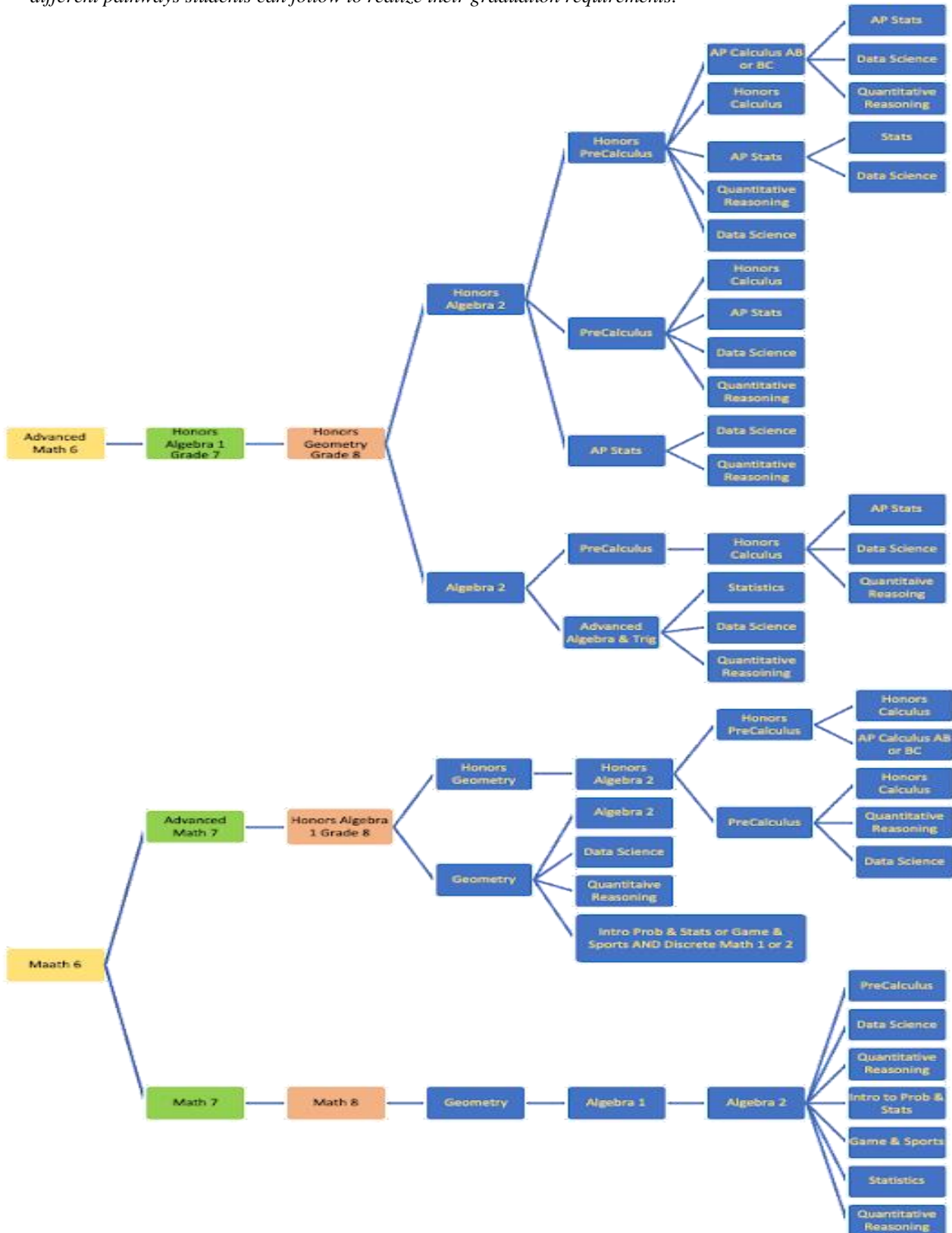
**8682: TV STUDIO INDEPENDENT STUDY: 5 credits Grade 12**

*Prerequisites: Aspects II and Teacher recommendation*

This is an advanced level of individualized instruction tailored to meet specific interests and needs of each student in film/television production. The course requires mutual arrangement between the student, teacher, and administrator. An Independent Study Contract must be completed prior to registering.

# MATHEMATICS

The FHS Math Department strives to ensure that all students experience success in mathematics. All students are encouraged to complete four years of mathematics. To realize this goal, the department offers a variety of courses at various levels of expertise. The learning environment encourages students to work together to reason mathematically, solve problems, and explore the connections between math, its theories, and applications. Here are different pathways students can follow to realize their graduation requirements.



Progress and success in learning mathematics are possible only when students select courses that are appropriate to their interest, skills, and the experience/knowledge demonstrated in previous math classes. Therefore, the Mathematics Department will recommend the placement of students in an appropriate course. Recommendations for placement in mathematics courses will be based on multiple criteria including scores achieved on the district approved assessments, student grades, and teacher input. Placement into Math Exploration courses may be required, but the credits received do not meet the required Math credits needed for graduation. Recommendations into Math Exploration classes will be based on multiple criteria, including scores achieved on the district approved standardized assessments, state assessment data, and when applicable the need to meet graduation requirements. Students and families are encouraged to discuss placement recommendations with current math teachers and school counselors.

**2019/2021/2036/2038/2039: MATH EXPLORATIONS (ME) 10, Algebra 1, or Integrated: 2.5-5 credits Grades 9-12**

10th grade students will be placed in ME 10 or ME Algebra 1 as supplemental support in Algebra 1 based upon criteria developed by the Franklin Township Public Schools. Students enrolled in these courses will also study those skills included on the Algebra 1 New Jersey Student Learning Assessment (NJSLA). 11th and 12th grade students who need to meet their graduation assessment requirement as per the NJDOE will be placed in ME Integrated.

**2142: GEOMETRY: 5 credits Grade 9**

Prerequisite: Math 8; 8th grade Algebra I with a final grade of 70%-79%; or 8th grade Honors Geometry with a final grade less than 70%; teacher recommendation.

The fundamental purpose of Geometry is to formalize and extend students' geometric experiences from the middle grade. Transformations, triangle congruence conditions, dilations and proportional reasoning, similarity, extending the notions of two and three-dimensional objects, scale factors of area and volume to construct informal arguments to explain formulas, circles, the relationship among segments on chords, secants, tangent, and theorems about circles are critical areas of focus for the course. Problem-solving skills and procedures similar to those emphasized on district assessments, the NJSLA, NJGPA and the SAT will be an integral part of this course. Note: For Spanish-speaking, Multilingual Learners, this course is offered in a bilingual setting

**2141: GEOMETRY HONORS: 5 credits Grade 9**

Prerequisite: 8th-grade Algebra I with a final grade of 80% or higher; Math 8 with a final grade of 90% or higher; teacher recommendation based on honors placement criteria which includes multiple measures.

Students can expect more rigor, proof, and abstraction in Geometry Honors in addition to topics in the geometry course. Students will use an axiomatic approach in the study of deductive reasoning and proof as applied to lines, planes, angles, parallel lines, congruent and similar polygons, special triangles, circles, areas and volume, and construction. Students will be able to analyze and synthesize the mathematical concepts presented in this course within the context of problem-solving. Students will be able to analyze and synthesize the mathematical concepts presented in the course and perform operations quickly and accurately. Students should be self-motivated and willing to do challenging work. Problem-solving skills and procedures similar to those emphasized on district assessments, the NJSLA, NJGPA and SAT/ACT will be an integral part of this course

**2082/2062\* ALGEBRA I: 5 credits Grade 10**

Prerequisite: 9th grade Geometry; or 8th grade Algebra I with a final grade of less than 70%; teacher recommendation.

In Algebra 1 the course content includes activities that focus on five critical areas: (1) Students develop fluency writing, interpreting, and translating between various forms of linear equations and inequalities,

and using them to solve problems; (2) Students learn function notation and language for describing characteristics of functions, explore many examples of functions, and interpret functions, given graphically, numerically, symbolically, and verbally, translate between representations, and understand the limitations of various representations. They compare and contrast linear and exponential functions, distinguishing between additive and multiplicative change; (3) Students use regression techniques to describe relationships between quantities; (4) Students compare the key characteristics of quadratic functions to those of linear and exponential functions and select from among these functions to model phenomena. Problem-solving skills and procedures similar to those emphasized on district assessments, the NJSLA, NJGPA, and the SAT/ACT will be an integral part of this course. Note: For Spanish-speaking Multilingual Learners, this course is offered in a bilingual setting.

### **2082A: Algebra 1 Advanced: 5 credits Grade 10**

*Prerequisites: Math 8 + HS Geometry with a final grade of 90% or higher; Math 8 + HS Geometry Honors with a final grade of 80% or higher; teacher's recommendation.*

This course is designed for 10th-grade students who took Math 8 in middle school and excelled in high school Geometry or Geometry Honors before taking Algebra 1. The pace and rigor make the course slightly different from Algebra 1 without introducing additional standards in Algebra 1. Specific examples of Algebra 1 content extensions from Algebra 2 include introducing function notation in the polynomial unit when performing operations on polynomial expressions, including the difference of cubes when factoring polynomials, including absolute value and piecewise functions, and including select exponential functions applications that support a more profound understanding of the function introduced in Algebra 1. Students will not receive honors credit or points in their high school GPA for Algebra 1 Advanced, similar to their peers who took Algebra 1 in middle school. Upon successfully completing Algebra 1 Advanced, students will be eligible to take Honors Algebra 2 the following year.

### **2112: ALGEBRA II: 5 credits Grades 10-12**

*Prerequisites: Middle School Geometry Honors with a final grade less than 80%: teacher's recommendation; or High School Geometry and Algebra 1.*

Building on the understanding of linear, quadratic, and exponential functions from Algebra I, the fundamental purpose of Algebra II is to extend function concepts to include polynomial, rational, radical, exponential, and logarithmic functions. Similarities of arithmetic with rational numbers and the arithmetic with rational expressions, functions, specifically polynomial, rational, radical, and exponential functions, transformations on graphs of functions and functions as models for solving problems, extend students' previous trigonometry to model periodic phenomena and different types of data distributions, samples, surveys, experiments, and simulations are critical areas of instructional focus within the course. Problem-solving skills and procedures similar to those emphasized on district assessments, the NJGPA, and SAT/ACT will be an integral part of this course.

Note: For Spanish speaking, multilingual learners, this course is offered in a bilingual setting.

### **2111: ALGEBRA II HONORS: 5 credits Grades 9-11**

*Prerequisite: Middle School Geometry Honors & Algebra 1 with a final grade of 80% or higher; or High School Geometry and Algebra 1 with a final grade of 90% or higher; teacher recommendation based on the honors placement criteria, which includes multiple measures.*

Students can expect more rigor, proof, and abstraction in Algebra 2 Honors than in the Algebra 2 course. Students will be able to analyze and synthesize the mathematical concepts presented in the course and perform operations efficiently. Students should be self-motivated and willing to do challenging work. Students will extend function concepts to include polynomial, rational, and radical functions. Similarities of arithmetic with rational numbers and the arithmetic with rational expressions, functions, specifically polynomial, rational, and radical functions, transformations on graphs of functions, and functions as models for solving problems, extend students' previous trigonometry to model periodic phenomena and different types of data and probability distributions, samples, surveys, experiments, and simulations are critical areas of instructional focus within the course. Students will be engaged in a collaborative environment in order to debate and discuss critical concepts. Problem-solving skills and procedures similar to those emphasized on district assessments, the NJSLA and SAT/ACT will be an integral part of this course.

**2152: PRE-CALCULUS: 5 credits Grades 10-12**

Prerequisite: Algebra II with a final grade of 80% or higher; teacher recommendation.

This course is designed for students who want to pursue four years of college preparatory mathematics in high school. Students will apply skills learned in Geometry, Algebra 1, and Algebra 2. The behavior and characteristics of polynomial, rational, and logarithmic functions will be investigated and used to model situations. Using a circular function approach to trigonometry, students will evaluate, simplify, and graph trigonometric expressions and inverses; solve trigonometric equations; and model real-world situations. Students will also study conics and the polar coordinate system. Scientific and graphing calculators will be used throughout the course. Problem-solving skills and procedures similar to those emphasized on the NJGPA and SAT/ACT will be a part of this course. **Seton Hall University dual enrollment (DE) credits are available.**

**2151: PRE-CALCULUS HONORS: 5 credits Grades 10 - 12 Seton Hall University dual enrollment (DE)**

Prerequisites: Algebra II Honors with a final grade of 80% or higher; Algebra II with a final grade of 90% or higher; teacher recommendation based on the honors placement criteria, which includes multiple measures.

Students can expect more rigor, proof, and abstraction in this course as compared to the Pre-Calculus course. This course is an intensive study of algebraic (polynomial and rational) and transcendental (exponential, logarithmic, trigonometric) functions to model situations. Emphasis is placed on the integration of algebraic and geometric processes for solving problems while functional theory is stressed throughout the course. The rigorous study of analytic geometry and the introduction to limits provide a solid foundation for the study of calculus. Topics include graphs and properties of integers, which are used as a tool in the problem-solving process. Students will be able to analyze and synthesize the mathematical concepts presented in the course and perform operations quickly and accurately. Students should be self-motivated and willing to do challenging work. Problem-solving skills and procedures similar to those emphasized on the NJGPA and SAT/ACT will be a part of this course. **Seton Hall University dual enrollment (DE) credits are available.**

**2171: CALCULUS I HONORS: 5 credits Grades 11-12 Seton Hall University dual enrollment (DE)**

Prerequisites: Pre-Calculus with a final grade of 80% or higher; or Pre-Calculus Honors with a final grade less than 80%; teacher recommendation.

This course is for students who are college-bound and are interested in furthering their mathematical knowledge. Calculus Honors extends the concepts and builds upon the skills developed in Pre-Calculus/Honors. Primary topics include the concepts and applications of limits, derivations, and integrals. Students are required to have a graphing calculator and the calculators recommended are the TI-84 or TI-84 Plus. Students will be able to analyze and synthesize the mathematical concepts presented in the course and perform operations quickly and accurately. Students should be self-motivated and willing to do challenging work. **Seton Hall University dual enrollment (DE) credits are available.**

**2170: AP CALCULUS AB: 5 credits Grades 11-12 Seton Hall University dual enrollment (DE)**

Prerequisites: Pre-Calculus Honors with a final grade of 80% or higher; or Pre-Calculus with a final grade of 90% or higher; teacher recommendation based on the honors placement criteria, which includes multiple measures.

Students are expected to have a thorough knowledge of college preparatory mathematics as well as basic knowledge of graphing utility. This course is college level with general theory and techniques of calculus developed and applied to a wide variety of functions with corresponding applications. Students will develop an ability to use critical thinking and creative thinking as applied to both classwork and group projects. Students will study the definition of limit, differentiation, and integrations and their applications, exponential and logarithmic functions. Students may choose to participate in the AP Calculus AB Exam. **Seton Hall University dual enrollment (DE) credits are available.**

**2160: AP CALCULUS BC: 5 credits Grades 11-12 Seton Hall University dual enrollment (DE)**

Prerequisite: Calculus Honors with a minimum grade of 80; AP Calculus AB with a minimum grade of 75; teacher recommendation; or In the absence of taking a formal Calculus course, students are required to complete ALL of the FHS AP Calculus BC summer assignment.

Students can expect a great deal of rigor, proof, and abstraction in the Calculus BC course. Students are expected to have a thorough knowledge of college preparatory mathematics as well as basic knowledge of graphing utility. This course is college level with general theory and techniques of calculus developed and applied to a wide variety of functions with corresponding applications. Students will be able to analyze and synthesize the mathematical concepts presented in this course. Students will model written descriptions of physical situations with a function, a differential equation, or an integral. Students may choose to participate in the AP Calculus BC Exam. **Seton Hall University dual enrollment (DE) credits are available.**

**2190: DATA SCIENCE: 5 credits Grades 10-12**

Prerequisite: Geometry and Algebra 1 and/or teacher recommendation.

In this course students will learn to understand, ask questions of, and represent data through project-based units. The units will give students opportunities to be data explorers through active engagement, developing their understanding of data analysis, sampling, correlation/causation, bias and uncertainty, modeling with data, making and evaluating data-based arguments, and the importance of data in society. Students examine and analyze creative and non-traditional representations of data relevant to students. At the end of the course, students will have a portfolio of their data science work to showcase their newly developed knowledge and understanding. **Without Algebra II this course WILL NOT meet college entrance requirements.**

**2185: QUANTITATIVE REASONING: 5 credits RVCC concurrent enrollment (CEP) Grades 11-12**

Prerequisite: Geometry & Algebra 1 and/or teacher recommendation

This course builds upon Geometry & Algebra 1 to cover mathematical concepts such as functions, personal finance, statistics, probability, and their applications. It develops students' ability to reason with quantitative information. Topics include using data, functions, and graphs as they relate to fiscal, environmental, and health applications, quantitative reasoning, and statistical thinking. This is a general education math course in Mathematical Literacy built on a basic algebra prerequisite to serve students in select career/technical as well as various liberal arts programs, such as Liberal Arts, Visual Arts, Fitness, or Social Science majors). All college graduates, regardless of their choice of undergraduate major, need to be able to make responsible decisions on fiscal, environmental, and health issues that require mathematical reasoning skills. RVCC concurrent enrollment (CEP) credits are available. **Without Algebra II, this course WILL NOT meet college entrance requirements.**

**2202: INTRODUCTION TO PROBABILITY AND STATISTICS: 2.5 credits Grades 10-12**

Prerequisites: Geometry and Algebra I and/or teacher recommendation.

This semester course is designed for students who want an alternative or addition to Statistics in their junior or senior year. It is especially recommended for those students who plan to do research in the social or physical sciences. Upon completion of this course, students should understand the fundamentals of statistics that are used in research and data analysis. Topics will include descriptive statistics, probability, inferential statistical concepts, and inferential statistical methodology. Problem-solving skills and procedures similar to those emphasized on the NJGPA and the SAT/ACT will be integral in this course. Either Intro to P/S or Game & Sports Statistics can count towards 2.5 math graduation credits, not both combined. **Without Algebra II this course WILL NOT meet college entrance requirements.**

**2204: GAME AND SPORTS STATISTICS: 2.5 credits Grades 10-12**

Prerequisites: Geometry and Algebra I and/or teacher recommendation.

This semester course is designed to introduce students to the use of mathematics, statistics, and probability in the analysis of sports performance, sports records, and game strategy. Topics will include

descriptive statistics, correlation, probability, and game theory. Problem-solving skills and procedures similar to those emphasized on the NJGPA and the SAT/ACT will be integral in this course. Either Game & Sports Statistics or Intro to P/S can count towards 2.5 math graduation credits, not both combined. **Without Algebra II this course WILL NOT meet college entrance requirements.**

**2203: STATISTICS: 5 credits Grades 11-12 Seton Hall University dual enrollment (DE)**

Prerequisites: Geometry and Algebra 1 with a final grade of 75% or higher; teacher recommendation.

The purpose of this statistics course is a hands-on introduction to the major concepts of Statistics. Basic topics of study include event probability, normal probability distribution, collection and description of data, frequency tables and graphs, measures of central tendency and variability, random variables, & random sampling. Advanced topics also include correlation, central limit theorem, confidence intervals, and hypothesis testing. Problem-solving skills and procedures similar to those emphasized on district assessments, the NJGPA and SAT/ACT will be an integral part of this course. This statistics course is an excellent option for students interested in pursuing further study in business, mathematics, and lab sciences. Seton Hall University dual enrollment (DE) credits are available. **Without Algebra II this course WILL NOT meet college entrance requirements.**

**2210: AP STATISTICS: 5 credits Grades 10-12 Seton Hall University dual enrollment (DE)**

Prerequisites: Any Honors Math course or Pre-Calculus with a final grade of 80% or above; teacher recommendation.

The purpose of this Advanced Placement course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes while exploring data: 1) observing patterns and departures from patterns; 2) planning a study and deciding what and how to measure; 3) anticipating patterns-producing models and using probability and simulation; 4) statistical inference-confirming models. This course is an excellent option for any student who has successfully completed a second-year course in algebra.

**2280: SAT MATH PREPARATION: 2.5 credits Grades 11-12**

Prerequisites: Geometry & Algebra 1 with a final average of 75 or better and/or teacher recommendation (students may take SAT Math during the 10th grade spring semester concurrently with Algebra 1).

Preparing for the SAT in Math involves strategic preparation in relation to the content of Geometry, Algebra 1, and Algebra 2. Math SAT Prep will connect the concepts and skills in reasoning, problem-solving, and test-taking strategies that prepare students for the SAT subject test in Mathematics. Topics include Number and Operations, Algebra and Functions, Geometry and Measurement Data Analysis, and Statistics and Probability. This course is recommended as an elective for all students planning to take the Math SAT by the end of the school year. This course only meets an elective requirement.

**2502: INTRODUCTION TO JAVA PROGRAMMING: 5 credits Grades 9-12**

Prerequisites: High School Geometry with a final grade of 80% or better; Middle School Algebra 1 or Middle School Geometry with a final grade of 80% or better; teacher recommendation.

Introduction to Java Programming is a course designed to introduce students to the foundations of computer science and programming in a high-level language. The course focuses on STEM problem solving and building a knowledge base of Java programming to prepare students for the AP CS-A course. Students will gain an appreciation for the history of computing and computers, computer design, computing number systems, Java syntax, and basic operations, Java I/O, programming structures common to high-level languages, Java methods, and Java data structures. Although the students may be exposed to Python early in the course to quickly master common concepts, the focus will swiftly transition to Java which is the primary language of the course. An emphasis will be placed on developing computational thinking, logic, and problem decomposition skills in order to prepare for success in future coursework in computer science. Students will gain experience working with a variety of problems that reflect their interests and background. An interest in problem-solving and programming is required.

**2530: AP COMPUTER SCIENCE A: 5 credits Grades 10-12**

Prerequisite: Introduction to JAVA Programming (required) with a final grade of 80% or better; teacher recommendation; or an approved summer Intro to Java instruction with the required completion of the FHS AP Computer Science summer assignment.

This year-long course covers topics found in a college-level first course in computer science. The course is designed to help students master the basics of Java programming and equip them to successfully pass the AP exam at the end of the year. This is a rigorous course. The course introduces students to computer science with fundamental topics that include problem-solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and designs using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problem.

## Health and Physical Education

The Health and Physical Education program is designed to motivate all students toward maintaining health and fitness through lifelong interest and enjoyment of physical activity.

Students are scheduled into a required program consisting of individual, dual and team activities. The focus is on learning and advancing strategies of sport, exposure to lifelong fitness activities, and opportunities to work harmoniously with others. A wide selection of fitness and team activities is offered. Examples are tennis, team handball, field hockey, and Ultimate Frisbee.

Students are encouraged to strive for physical fitness throughout high school by actively participating in physical education classes.

Physical fitness is an important aspect of the program as all students are introduced to the extensive Fitness Center where Nautilus, treadmills, and free weights are utilized. Students are taught the importance of each component by learning their strengths and weaknesses. Students are encouraged to set personal fitness goals to maintain high levels of fitness.

Health and Physical Education is required each year of enrollment and is currently integrated for Grades 9 through 12.

The health courses emphasize understanding self and others, decision-making skills, and the need for personal responsibility for choices made. Self-esteem, drug education, first/aid and CPR education, and problems confronting today's youth are some of the topics addressed.

Tenth grade students are scheduled into a theory driver education course to prepare them for the New Jersey Division of Motor Vehicles written examination. Students passing the State Examination and completing the mandated 30 hours will receive a test certificate, which is accepted by the Division of Motor Vehicles.

All Physical Education classes are co-educational with active participation required in order to maintain a passing grade. Fifth year students who are scheduled for academic classes are required to take and pass a fifth year of physical education for four marking periods, provided they have successfully completed four years of Health.

## HEALTH AND PHYSICAL EDUCATION CREDIT FOR GRADUATION

Fifth year students who are scheduled for academic classes are required to successfully complete a fifth year of Physical Education for four marking periods, provided they have successfully completed four years of Health.

Excused Absences: The only exception to the graduation requirement for Physical Education is a valid medical excuse. **All long-term medical excuses, (more than 3 days), must be signed by a physician and must indicate the approximate length of time the student is to be excused. The student will be readmitted to the Health and Physical Education program upon receipt of a medical release. Credit will be given for the time spent in class. Extended medical excuses must be renewed each year.**

Requests for short term excused participation in Physical Education must be signed by a parent/guardian and be submitted to the school nurse for approval. **Students who cannot participate due to short term illness (3 days or less), or other approved absence (for example, a class trip) have the opportunity to make up the time through teacher approved arrangements.** Those students who receive written medical approval for a modified program (long term medical excuse) will be scheduled into appropriate activities, if available, and will receive credit for Physical Education.

**\*Note: Any pupil whose parent/guardian submits to the school principal a signed statement that any part of the instruction in Family Life Education is in conflict with her/his conscience, or sincerely held moral or religious beliefs will be excused from that portion of the course when such instruction is being given, and no penalties as to credit or graduation shall result.**

### **5073: TEEN PEP (PREVENTION EDUCATION PROGRAM): 5 Credits Grade 11-12**

*Prerequisite: Teacher recommendation*

This elective is for seniors only and is a comprehensive approach to family life education. Utilizing interactive, instructional strategies with small groups, students meet five days per week for the academic year. They are taught and trained in the Teen PEP Sexual Health curriculum. Additionally, they are trained to become peer educators and provide outreach to other students. Students will be selected for this course upon completion of an application and an interview. Numerical grades will be assigned. Evaluation will consist of outreaches, teacher evaluation, and self-evaluation. This course can be used as a replacement for Physical Education. This course can be repeated for credit.

### **5074: CONCEPTS OF FITNESS: 5 Credits Grade 9 - 12**

This course can be taken as a replacement for Physical Education. Health curriculum will be built into the regular class structure for students in grades 9, 11 & 12. Students in 10th grade will pull out for one marking period for Driver's Education. CF will offer an in-depth opportunity for students to learn about various fitness, strength, and conditioning concepts. The two primary goals of CF are: for students to learn the necessary information and skills needed to improve their individual fitness levels on their own without the assistance of trainers, memberships, and athletic programs; and to improve the five components of their personal fitness. This will be achieved by learning about current and up-to-date concepts while giving students the opportunity to improve their health and fitness during various routines in class. Evaluation will consist of successful demonstration of various lifts, practical weight training post-tests and evaluation. This course can be repeated for credit. **Prerequisite: Student must have passed either COF or Physical Education the prior year to be eligible for this course.**

**5075: ONE WARRIOR – A PEER PHYSICAL EDUCATION PROGRAM: 5 credits Grades 10-12**

*Prerequisite: Teacher recommendation*

This physical education partnership program is designed to allow students with a wide range of abilities, disabilities and needs to meet the goals and standards of the regular physical education program. Each general education student will partner with a student with special needs to complete all activities. The program will provide both special needs and general education students with the opportunity to develop a sense of pride, confidence, and self-identity through physical development and achievement. Evaluation will consist of ongoing formal and informal assessment of student performance and district screening tests. One Warrior satisfies the state requirement for Health and Physical Education.

**JUNIOR RESERVES OFFICERS' TRAINING CORP**

**JROTC (I - IV): 5 credits Grades 9-12**

The Junior Reserve Officers' Training Corps (JROTC) Program prepares high school cadets for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. The program is a stimulus for promoting graduation from high school and provides instruction and rewarding opportunities that benefit the cadet, community, and nation.

JROTC satisfies the state requirement for Health and Physical Education, so that a student taking JROTC does not have to take Health and Physical Education in the same year. If taken in conjunction with Health and Physical Education, it will fulfill the requirement in 21st Century Life Skills & Careers.

**SCIENCE**

*The Franklin High School Science Department offers a comprehensive science program designed to meet the needs and interests of all students. Every student must earn at least 15 credits in science to graduate. Physics, Chemistry and Biology are required courses for graduation at Franklin High School. Students who are planning to attend college are recommended to take science courses and electives for all four years of high school*

**3101: CONCEPTUAL PHYSICS: 5 credits Grade 9**

*Prerequisites: None*

Physics is a conceptual approach to understanding motion, forces and energy transformations. This course is less mathematically based than Lab Physics. The topics will include motion; work, power and energy; electrostatics; circuits; motors and generators and transformers; and power generation. Construction of knowledge is emphasized through experimentation and cooperative group projects. This is a college preparatory course.

**3102: COLLEGE PREP PHYSICS: 5 credits Grade 9**

*Prerequisites: None*

This course is an algebra-based approach to the fundamentals of physics. The topics covered include motion; dynamics; conservation laws; electrostatics; circuits; vibrations & waves; light; mirrors & lenses; atomic physics. The units of study are intended to channel student interests into an understanding of the physical laws of the universe. Construction of knowledge is emphasized through experimentation and

cooperative group projects. **Note: For Multilingual Learners at levels 1 & 2, this course is offered in a co-taught, sheltered English setting.**

### **3103: HONORS PHYSICS: 5 credits Grade 9**

*Prerequisites: 80% or better in Honors Algebra I or Honors Geometry. In addition, 80% or better in Honors 8th-grade Science, or 87% or better in 8th-grade Science. Teacher Recommendation.*

This is a more mathematically rigorous course than College Prep Physics. Topics covered include motion; dynamics; conservation laws; electrostatics; circuits; vibrations & waves; light; mirrors & lenses; atomic physics. The units of study are intended to channel student interests into an understanding of the physical laws of the universe. Construction of knowledge is emphasized through experimentation and cooperative group projects.

### **3115: AP PHYSICS 1: 6 credits Grades 9-12**

*Prerequisites for Freshmen: 90% minimum in Honors Algebra I or Honors Geometry, and 90% minimum in Honors 8th-grade Science. Prerequisite for 10th, 11th, and 12th graders is Algebra I.*

*Prerequisites for current FHS students: Any prior physics course.*

This full-year AP course is the equivalent of a first-semester college course in algebra-based physics. AP Physics I students will have one extra lab period a week making this a 6 credit course. Topics include kinematics, Newtonian dynamics, circular motion, rotational kinematics and dynamics, conservation laws including linear momentum, angular momentum, and energy, Newtonian gravitation, and harmonic motion. Knowledge of algebra and basic trigonometry (but not calculus) is required. The goal of this course is to apply the principles of physics to solve problems, design experiments, and evaluate experimental data. The ability to develop and use physics knowledge by applying it to the practice of scientific inquiry and reasoning is a major focus. The course includes a substantial laboratory component, which fosters student engagement in the practice of science through experimenting, analyzing, making conjectures and arguments, and solving problems in a collaborative setting. The AP Physics 1 course will prepare students to take the AP Physics 1 examination.

### **3124: AP PHYSICS C: 6 credits Grade 11-12**

*Prerequisites: Calculus and any prior physics course.*

This is a calculus-based AP physics course designed for those students who plan on majoring in the sciences in college and is recommended for those who plan on majoring specifically in engineering or a physical science program. AP Physics C students will have one extra lab period a week making this a 6-credit course. This course is intended to prepare students for the Advanced Placement Level C Mechanics exam and the Electricity and Magnetism exam. This course emphasizes problem solving approaches and a substantial laboratory component. Topics covered in this course include kinematics, Newtonian dynamics, energy and momentum conservation, rotational kinematics/dynamics and angular momentum, harmonic motion, Newtonian gravitation, electrostatic forces and fields, DC circuits, inductors and capacitors, magnetic forces and fields, and Maxwell's equations. Computers will be used extensively in gathering and analyzing experimental data.

### **3202: COLLEGE PREP CHEMISTRY: 5 credits Grade 10**

*Prerequisites: None*

This course covers the two major strands in chemistry: structure and properties of matter and chemical reactions. Students will be required to use the factor label method for stoichiometry, exponentials for large and small numbers, and direct and inverse mathematical relationships. This laboratory class is designed for those students who wish to continue their preparation in the sciences for college entry. Units of study include: atoms; periodic table; bonding; reactions & reaction rates; mole quantities, gas laws, states of matter, water & solutions, acids & bases; organic chemistry. **Note: For Multilingual Learners at levels 1 & 2, this course is offered in a co-taught, sheltered English setting.**

**3203: HONORS CHEMISTRY: 5 credits Grade 10**

*Prerequisites: Physics Honors with a 75% minimum grade, or CP Physics with a 90% minimum grade. Teacher recommendation.*

This is a more mathematically rigorous course than CP Chemistry. This course covers the two major strands in chemistry: structure and properties of matter and chemical reactions. Students will be required to use the factor label method for stoichiometry, exponentials for large and small numbers, and direct and inverse mathematical relationships. This laboratory class is designed for those students who wish to continue their preparation in the sciences for college entry. Units of study include: atoms; periodic table; bonding; reactions & reaction rates; mole quantities, gas laws, states of matter, water & solutions, acids & bases; organic chemistry.

**3204: AP CHEMISTRY: 6 credits Grades 11-12**

*Prerequisite: Any prior chemistry course.*

This is an AP course for students interested in studying chemistry at the college level. AP Chemistry students will have one extra lab period a week making this a 6-credit course. The course emphasizes the theoretical aspects of chemistry including topics such as atomic theory and structure, chemical bonding, in-depth analysis of states of matter, reaction types, stoichiometry, equilibrium, kinetics, thermodynamics, advanced descriptive chemistry, laboratory work, and chemical calculations. Laboratory experiments will require careful observation, recording of data, calculations, data analysis, and interpretation of results. Emphasis will be on experimental procedures and quantitative and qualitative analysis. AP Chemistry is designed to prepare students to take the Advanced Placement examination in Chemistry.

**3300: COLLEGE PREP BIOLOGY – ACADEMY: 5 credits Grades 9 – 11**

The FHS Science Department has added a Health Professions Academy dual enrollment partnership program with Rutgers University's School of Health Professions. The Health Professions Academy is geared to students interested in becoming a nurse, medical assistant, and/or working in a hospital, lab, or doctor's office.

**3301: CONCEPTUAL BIOLOGY: 5 credits Grade 11**

*Prerequisites: Chemistry, any level.*

This course is designed to meet the Next Generation Science Standards in Life Science. The rigor of this course will prepare students with the following skills: critical thinking, problem solving, collaboration and college and career readiness. This course is centered on five major strands: structure & function; inheritance & variation of traits; matter & energy in organisms and ecosystems; interdependent relationships in ecosystem; natural selection & evolution. Students will also deal with decisions involving themselves, their relationships within the biosphere, and using models and evidence in scientific reasoning. The human body systems will not be emphasized and dissections will not take place.

**3302: COLLEGE PREP BIOLOGY: 5 credits Grade 11**

*Prerequisites: 75% or better in CP Chemistry.*

This course is designed to meet the Next Generation Science Standards in Life Science. This laboratory class is designed for those students who wish to continue their preparation in the sciences for college entry. All topics identified in Biology will be explored but at a faster pace, with more in-depth discussions and activities. **Note: For Multilingual Learners, this course is offered in a co-taught, sheltered English setting.**

**3303: HONORS BIOLOGY: 5 credits Grade 11**

*Prerequisites: Chemistry Honors with 75% minimum or CP Chem Prerequisites: Chemistry Honors with 75% minimum or CP Chemistry with a 90% minimum.*

This course is designed to meet the Next Generation Science Standards in Life Science. This is a course for students with high interest and proven ability in science. It is more rigorous and moves at a faster pace than CP Biology. The strands listed in Biology are treated in an intensive manner. Laboratory sessions emphasize and illustrate the classroom topics, which include, but are not limited to, biochemistry, cell biology, cell reproduction & differentiation, genetics, inheritance, evolution, energy transformations, ecology. Emphasis is placed upon developing good scientific methodology and lab skills.

**3304: AP BIOLOGY: 6 credits Grade 12**

*Prerequisite: Any prior biology and chemistry course.*

This is a course taught in a college format with one double period laboratory block per cycle. AP Biology is designed to enable students to develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The result will be readiness for the study of advanced topics in subsequent college courses. Emphasis is placed on science practice as a way to coordinate knowledge and skills in order to accomplish a goal or task. This course is aligned to the College Board curriculum and is centered on the underlying concept of evolution as the driver behind diversity and the unity of life. This is a demanding course for highly motivated students. AP Biology is designed to prepare students to take the Advanced Placement examination in Biology.

**3500: THE HUMAN BRAIN: 2.5 credits Grade: 12**

*Prerequisites: Any prior Biology course.*

This course will provide an introduction to the field of neuroscience. Students who are interested in the human brain will gain a basic understanding of how neurons send and receive information, the role different parts of the brain play in everyday tasks, and how the human brain makes sense of its surroundings. Students will dissect organs to further explore how the nervous system functions. The dissections will be conducted in pairs.

**3501: HONORS NEUROSCIENCE: 5 credits Grade: 12**

*Prerequisites: Any prior Biology course with an 80% minimum grade.*

This is a full year honors course. Students who are interested in pursuing the medical or research fields of neuroscience will gain an advanced understanding of how neurons send and receive information, the role different parts of the brain play in everyday tasks, cognition, and how the human brain makes sense of its surroundings. Furthermore, this course will also aim to connect neuroscience with psychology. Students will dissect organs to further explore how the nervous system functions. The dissections will be conducted in pairs or individually. As this course explores all of the topics from The Human Brain Course plus more, students interested should only enroll in one of the courses, not both.

**3502: ZOOLOGY: 2.5 credits Grade: 11-12**

*Prerequisites: Any prior Biology course.*

This course will provide students with an overview of the animal kingdom in evolutionary order including anatomical and ecological differences. The course will include virtual labs, creating models, and dissections of lesser animals. By the end of this course, students will be able to describe how humans and animal populations impact each other, list the characteristics of animals, apply appropriate laboratory safety techniques, utilize prior knowledge of microscopy and other lab tools, understand the modern system of classification, list and differentiate the different phyla of the animal kingdom and classes within each phylum, and compare the anatomy of different animals.

**3503: SCIENCE RESEARCH: 2.5 credits Grades: 11-12**

*Prerequisites: Physics, any level.*

The objective of this course is to provide opportunities for hands-on science research projects. The course will begin with instruction in reading and discussing current scientific literature and selecting a research question. Students explore subjects that they find interesting, then narrow their scope to a specific topic and project. By the end of the course students will develop a project proposal that, with further work, could eventually be entered in a national science competition (such as Intel Science and Engineering Fair, Regeneron Science Talent Search, Google Science Fair).

**3504: AP ENVIRONMENTAL SCIENCE: 5 credits Grades 11-12**

*Prerequisite: Any prior biology course, or concurrent enrollment in Honors Biology.*

Students are encouraged to consult with either their counselors or science teachers prior to enrollment. This course is designed to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze natural and man-made environmental issues, to evaluate the risks and costs associated with these problems, and to examine alternate solutions to the challenges confronting society. The topics covered include earth

systems: populations, communities and ecosystems; energy flow; natural resources; environmental changes; environmental economics and policy; and choices for the future. Advanced Placement Environmental Science is designed to prepare the student to take the AP Environmental Science exam.

### **3602: OVERVIEW OF ENGINEERING: 2.5 credits Grades 10-12**

*Prerequisites: Physics and Algebra I*

This course will expose students to key elements of an engineering experience. It also introduces them to some of the rigors of an engineering curriculum including significant levels of mathematical applications. After taking this course, students should be able to gauge their level of interest in pursuing an engineering career. The course provides students with the opportunity to work in teams to solve engineering problems. They are taught a disciplined methodical approach to finding solutions. Students then apply the method to solve force system problems and develop a truss bridge design. Other technical areas of exploration include electronics, materials testing, power generation and ballistics.

### **3612: BIOTECHNOLOGY: 2.5 credits Grade: 12**

*Prerequisites: Any prior Biology and Chemistry course with an 80% minimum grade.*

This course is an introductory course to biotechnology. Topics include the history and applications of DNA technology, biopharmaceuticals, genomics, therapeutics, and bioethics. Current events are used as a context for study. Students will use advanced research techniques and equipment similar to those found in university and professional laboratories.

### **3622: FORENSICS: 5 credits Grades 11-12**

*Prerequisites: Chemistry and Biology.*

Forensics is an elective course designed to give the student a background in forensic science and criminalistics used in today's law enforcement. Throughout the course, students will have the opportunity to learn how forensic scientists analyze the evidence found at crime scenes, and elsewhere, to determine a suspect's guilt or innocence in a particular crime. Biological and chemical background knowledge is needed to perform investigations, and to determine how that information is used by particular sub-disciplines within the role of forensic science. The student will use the skills and concepts developed in the science classroom to bridge science with real life applications. The course topics will include, but are not limited to, history and development of Forensic Science, analysis of the crime scene and types of physical evidence, techniques of organic and inorganic analysis.

### **3623: SCIENTIFIC PROGRAM FOR ENGINEERS: 2.5 Credits Grades 10-12**

*Prerequisites: Physics and Algebra I.*

The objective of this course is to introduce students to computer programming with an engineering and scientific focus. The major course activity is the design, testing, and debugging of computer programs. There is an emphasis on the use of programming techniques to solve problems. The main programming language used in the course is Snap, developed at MIT and UC Berkeley. Students will develop a basic understanding of data structures, algorithms, and graphics. If time permits students may explore more advanced scientific programming languages and/or embedded programming using microcontrollers. The students will perform a capstone project, using a computer program to interface with a science or engineering experiment.

### **3624: ROBOTICS: 2.5 credits Grades 10-12**

*Prerequisites: Physics*

Students will explore the fundamentals of robotics and robot design. Students will develop skills in robot construction and assembly, design, electrical systems, and simple programming. Students will engage in individual and small group design projects that include building robots for specific functions, and researching real world designs and applications.

### **3652: ANATOMY AND PHYSIOLOGY: 5 credits Grades 11-12**

*Prerequisites: Any prior Biology course, or co-current enrollment in Honors Biology.*

This course is designed to introduce students to the structure, function, and diseases of the human body. Instructional Units are organized by the study of the human organ systems. Students will study units on the skeletal, muscular, nervous, integumentary, circulatory, respiratory, immune, digestive, urinary, and reproductive systems. This course includes multiple dissections.

**3651: HONORS ANATOMY AND PHYSIOLOGY: 5 credits Grades 12**

*Prerequisites: Any prior Biology course with an 85% minimum grade.*

This course is designed to introduce students to the structure, function, and diseases of the human body. Instructional units are organized by the study of the human organ systems. Students will study units on the skeletal, muscular, nervous, integumentary, circulatory, respiratory, immune, digestive, urinary, and reproductive systems. This course includes multiple dissections.

**3650: ANATOMY AND PHYSIOLOGY I - Health Professions Academy: 5 credits Grades 11-12**

*Prerequisites: Acceptance into the Health Professions Academy*

This course is a dual-enrollment course with Rutgers University School of Public Health. Students follow Rutgers's curriculum and will take a test at the end of this course for 4 Rutgers credits.

**3656: ANATOMY AND PHYSIOLOGY II - Health Professions Academy: 5 credits Grades 12**

*Prerequisites: Acceptance into the Health Professions Academy and Ant/Phys I - Health Professions Academy.*

This course is the second in a two-course sequence and a dual-enrollment course with Rutgers University School of Public Health. Students follow Rutgers's curriculum and will take a test at the end of this course for 4 Rutgers credits.

**3400: DYNAMICS OF HEALTH CARE - Health Professions Academy: 2.5 credits Grades 11 and 12.**

This is a dual-enrollment course with Rutgers University School of Public Health. This course focuses on the elements of healthcare as an industry and a profession. Topics include health insurance, learning about the different careers in health care, and bioethics.

**3653: HUMAN BIOLOGY CEP: 5 credits Grades 11-12**

Students who have already taken Conceptual Biology, CP Biology, or Honors Biology are ineligible to take this course. This course is a first-year biology course taken in lieu of lab or honors biology. Students who have already taken biology, lab biology, or honors biology are ineligible to take this course. Raritan Valley Community College (RVCC) and Franklin High School recognize the value of a program that allows high school students to begin to accrue college credits while completing their high school experience. Students who successfully complete a course in the Concurrent Enrollment Program (CEP), can apply these credits to RVCC, or have them transferred to other colleges across the nation. This is an academically rigorous course equivalent to the first year RVCC Biology course. To qualify, a student must pass the RVCC Accuplacer placement exam and pay a fee for the course. Upon receiving 80% or higher for the year, the student can earn four college credits from RVCC. Participating students must meet the following criteria: Completion of Chemistry Lab with a minimum 90% or Chemistry Honors with a minimum grade of 80% and/or other multiple assessment criteria

**3662: ASTROPHYSICS I: GENERAL RELATIVITY: 2.5credits Grades 11-12**

*Prerequisites: Any Honors or AP Physics course, and pre-calculus.*

In this course, students learn advanced physics using advanced math skills. Topics include modern cosmology, high energy astrophysics, plasma physics. Students engage in short and long research projects throughout the year. Students are expected to build a strong mathematical and physical foundations for their future college majors and careers while pursuing their interests in advanced physics.

**3663: ASTROPHYSICS II: QUANTUM PHYSICS: 2.5 credits Grades 11-12**

*Prerequisites: Any Honors or AP Physics course, and pre-calculus.*

In this course, students learn advanced physics using calculus. Topics include quantum physics, wave-particle duality and cosmological wave function and particle physics. Students engage in short and long

research projects throughout the year. Students are expected to build strong mathematical and physical foundations for their future college majors and careers while pursuing their interests in advanced physics.

## SOCIAL STUDIES

Students are required to earn 17.5 credits in Social Studies to meet State and local graduation requirements. All students must pass two years of United States History, one year of World History/World Cultures (A Changing World at FHS), and a ½ year in Financial Literacy. Additional credits may be earned by successful completion of electives in the Social Studies curriculum.

**CODE KEY: ESL – English as a Second Language, H – Honors, AP – Advanced Placement**

Students will be recommended for English as a Second Language (ESL), Honors, and Advanced Placement based on standardized test scores in reading and writing, departmental standards, individual achievement, and recommendation of the previous year's Social Studies teacher.

**4022: UNITED STATES HISTORY I: 5 credits Grade 9**

This course provides a chronological study of the social, economic, and political experiences of a developing United States from the period of American expansion in the 1830's through the international and domestic policies that shaped the 1920's. Students are given the opportunity to study cause and effect relationships, to recognize and explain turning points in American History, and trace areas of conflict to current problems. New Jersey history and the contributions of various minorities are an integral part of this course. **Note: For Multilingual Learners at levels 1 & 2, this course is offered in a co-taught, sheltered English setting.**

**4021: UNITED STATES HISTORY I HONORS: 5 credits Grade 9**

*Prerequisites: Teacher recommendation and average of 90% or better in 8th grade course*

This honors level course provides an in-depth chronological study of the social, economic, and political experiences of a developing United States from the period of American expansion in the 1830's through the international and domestic policies that shaped the 1920's. A college level textbook is required reading. Students will be expected to develop independent research projects, analyze and interpret supplemental readings of modern and contemporary historians, write essays and compositions, & participate vigorously in class discussions. Assignments, projects and class activities are designed to provide a challenge to highly motivated students with above average ability and writing proficiency.

**4032: UNITED STATES HISTORY II: 5 credits Grades 10-11**

*Prerequisite: United States History I*

This course provides a chronological study of the social, economic, and political experiences of a developing United States from the period of the great depression through today. Students are given the opportunity to study cause and effect relationships, to recognize and explain turning points in American History, and to trace areas of conflict to current problems. New Jersey History and the contributions of various minorities are an integral part of this course. **Note: For Multilingual Learners at levels 1 & 2, this course is offered in a co-taught, sheltered English setting.**

**4031: UNITED STATES HISTORY II HONORS: 5 credits Grades 10-11**

*Prerequisites: United States History 1 Honors with an average of 85% or better and/or other multiple assessment criteria. Writing proficiency and demonstrated achievement in previous social studies courses are required of students taking this course.*

This honors level course provides an in-depth, chronological study of the social, economic, and political experiences of a developing United States from the great depression through today. A college-level textbook is required reading. Students will be expected to develop independent research projects, analyze and interpret supplemental readings of modern and contemporary historians and primary

sources, write essays and compositions, and participate vigorously in class discussions. Assignments, projects, and class activities are designed to provide a challenge to highly motivated students with an above average ability.

**4080: AP UNITED STATES HISTORY I: 5 credits Grades 9**

*Prerequisites: 8th Grade Honors History with an average of 90% or better or 8th Grade United States History with a 95% or better.*

The AP Program in United States History is designed to provide students with analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States History. The content of course covers early American history from the rise of political parties, the experience of African Americans, abolition movement, the Civil War, westward expansion, and the rise of industrial capitalism. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. This course is the first of a two part series on United States History. Students will take the AP exam after taking AP United States History II.

**4090: AP UNITED STATES HISTORY II: 5 credits Grades 10-12**

*Prerequisites: United States History 1 Honors with an average of 90% or better and/or other multiple assessment criteria*

The AP Program in United States History is designed to provide students with analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students will learn to assess historical materials for their relevance to a given interpretive problem, their reliability, and importance. Students will learn to weigh the evidence and interpretations presented in historical scholarship. The students will develop the skills necessary to arrive at conclusions on the basis of informed judgment and to present reasons and evidence clearly and persuasively in essay format.

**4012: A CHANGING WORLD: 5 credits Grades 11-12**

This course provides a study of the history of an increasingly interdependent world, while examining the complexities and diversity of today's global societies and world geography. Students will be provided an opportunity to understand the geographic influences on the development of world cultures; the relationship between the political, social, economic, and religious factors in foreign countries; and the relationship between the history of one nation to world history. In addition to the standard program, A Changing World is offered to students at an honors level and Advanced Placement level. **Note: For Multilingual Learners at levels 1-3, this course is offered in a co-taught, sheltered English setting.**

**4011: A CHANGING WORLD HONORS: 5 credits Grades 11-12**

*Prerequisites: United States History II Honors or AP United States History II with an average of 85% or better, United States History II with an average of 90% or better, and/or other multiple assessment criteria*  
This honors course is designed for students who have demonstrated above average ability in social studies courses and are interested in an intense study of the interdependence and development of the modern world. Students are required to develop independent research projects, analyze and interpret supplemental readings, write essays and compositions, and contribute vigorously to class discussions.

**4015: AP WORLD HISTORY: 5 credits Grades 11-12**

*Prerequisites: United States History II with an average of 90% or better or AP United States History II or United States History II Honors with an average of 85% or better and/or other multiple assessment criteria*  
The purpose of this course is to develop greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. Emphasis is on relevant, factual knowledge, deployed in conjunction with leading interpretive issues and types of historical evidence. The course builds on an understanding

of cultural, institutional, and technological precedents that, along with geography, set the human stage, Periodization, explicitly discussed, forms an organizing principle for dealing with change and continuity throughout the course. Specific themes provide further organization to the course, along with the consistent attention to contacts among societies that form the core of world history as a field of study

## **SOCIAL STUDIES ELECTIVES**

### **4100: AP GOVERNMENT & POLITICS: 5 credits Grades 11-12 (Only offered in even school years)**

In this college-level course, we will explore the formal and informal structures that contribute to the American political process. Students will become familiar with frequently used terminology related to government and political systems and will study the historical development of such systems in the United States. While the course will provide extensive preparation for the AP Government & Politics exam, it will also help students develop essential skills necessary for collegiate success, such as formal writing, note-taking, critical thinking, and analytical reading. The ultimate goal is to create critical consumers of mass media, productive and knowledgeable citizens, and strong future leaders. This course is for students possessing a curiosity to study law, government, and political science.

### **4101: AP COMPARATIVE GOVERNMENT & POLITICS: 5 credits Grades 11-12 (Only offered in odd years)**

This course introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures, policies, and political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues.

### **4102: HUMAN DEVELOPMENT, BEHAVIOR, AND RELATIONS: 2.5 credits Grades 10-12**

This course provides an organized study of human behavior, as it relates to one's growth, development, personal, and social relations. It is designed to provide students with basic knowledge and skills to cope with the realities of day-to-day living. Topics of study include foundations of human behavior, human growth and development, human behavior, learning and thinking, motivation, conflict, and social behavior. Students with career goals in science and the humanities are encouraged to take this course.

### **4104: SOCIOLOGY: 2.5 credits Grades 10-12**

This Sociology course, a semester elective, will provide an opportunity for the student to participate in an organized study of basic sociological principles. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. Emphasis is on relevant, factual knowledge, deployed in conjunction with leading interpretive issues and types of historical evidence. The course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. Periodization, explicitly discussed, forms an organizing principle for dealing with change and continuity throughout the course. Specific themes provide further organization to the course, along with the consistent attention to contacts among societies that form the core application to all societies. Broad topics of study include society and culture, the process of civilization, problems of social mobility, and community. Through participation in this Sociology course, students will be formally exposed to the knowledge and skills that are considered essential to their understanding of society and its people. exposed to the knowledge and skills that are considered essential to their understanding of society and its people. The research process plays a major role in the progression of this course.

### **4132: RACE, GENDER, AND EQUITY IN AMERICA: 2.5 credits Grades 11-12**

*This course satisfies the Race, Gender and Equity Graduation Requirement for the class of 2024-25 and all subsequent classes.*

The United States is composed of a widely diverse population with a multitude of religious, cultural, and ethnic identities. Each group has been shaped by and in turn shaped American society. This course will

explain the experiences of African Americans, women and other minorities in historical context while examining multiculturalism in our society.

**4133: RACE, GENDER, AND EQUITY IN AMERICA HONORS: 2.5 credits Grades 11-12**

*This course satisfies the Race, Gender and Equity Graduation Requirement for the class of 2024-25 and all subsequent classes.*

The United States is composed of a widely diverse population with a multitude of religious, cultural, and ethnic identities. Each group has been shaped by and in turn shaped American society. This course will explain the experiences of African Americans, women and other minorities in historical context while examining multiculturalism in our society. The honors option will contain additional reading and reflection material to widen the scope further for each topic. Students in the honors option will also conduct action research.

**4134: AP MICRO/MACROECONOMICS: 5 credits Grades 11-12**

AP Microeconomics is a one-semester, college level course. This course emphasizes economic principles as applied to the economy as a whole. Topics discussed will reflect the material included in the booklet "AP Economic Course Description". Lessons include the function of individual decision-makers, factors or resource markets and the role of the government will be studied in the context of efficiency and equity. AP Macroeconomics is designed to give the student a thorough understanding of the principles of economics that apply to an economic system as a whole. This course places particular emphasis on the study of national income and price determination, and also develops your familiarity with economic performance measures, economic growth, and international economics. In addition to preparing a student for the AP Exam in macroeconomics, a major emphasis of this course will be on the development of critical thinking skills and the application of economic principles and methodologies in problem solving. This course meets the state mandate for 2½ credits in financial literacy.

**4156/4157/4158: GLOBAL ISSUES: A HISTORY OF 20th and 21st CENTURIES (HONORS OPTION): 2½ credits per semester Grades 10-12**

*Prerequisites: US History I and US History II*

These courses seek to present a balanced and comprehensive picture of both the United States and all other nations throughout the world and their role in solving global problems and dealing with catastrophes both natural and man-made.

*\*4156: Fall Topics: Revolution, Human Rights, Genocide and Holocaust, United States Challenges and Change, Foreign Aid. Case Studies: South Africa, India and Pakistan, Russia, and Brazil.*

*\*4157: Spring Topics: Global Security and Terrorism, Global Resources and the Environment, International Trade, the United States Role in a Changing World, and Millennium goals. Case Studies: Iran, China, and the Middle East.*

**4160: AP PSYCHOLOGY: 5 credits Grade 11-12**

This course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological basis of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of psychological disorders, and social psychology.

**4162: AP AFRICAN AMERICAN STUDIES: 5 credits Grades 11-12**

*This course satisfies the Race, Gender and Equity Graduation Requirement for the class of 2024-25 and all subsequent classes.*

This interdisciplinary course reaches into a variety of fields -- literature, the arts, humanities, political science and geography to explore the vital contributions of African-Americans. This course has been developed over the past decade with the support of Universities, College professors, and teachers across the country to offer students an evidence-based introductory course in African American Studies. This course is currently in its final pilot year before going live to all schools in the 2024-25 school year.

## WORLD AND CLASSICAL LANGUAGES

### **7012: FRENCH I: 5 credits Grades 9-12**

This introductory course presents the four basic language skills of understanding, speaking, reading, and writing in the target language. Through this full-immersion course, students will experience opportunities to use all modes of communication and gain an understanding of the perspectives of other cultures. Students will learn through thematic units supplemented by a variety of materials.

### **7022: FRENCH II: 5 credits Grades 9-12**

*Prerequisites: French I and/or other multiple assessments*

Students will build upon the communication skills acquired in level one. Emphasis is placed upon expanding knowledge and focuses on more advanced communication in the target language. Appreciation of French customs and culture will continually develop. This course is recommended for most students who have successfully completed level one and are interested in developing the language ability to communicate with a native speaker on topics previously studied.

### **7023: FRENCH II HONORS: 5 credits Grades 9-12**

*Prerequisites: French I with an 80% or above; and/or teacher recommendation*

This course is taught in French. Students will build upon the communication skills acquired in level one. Continued emphasis is placed on developing students' communicative skills toward a Novice-High proficiency. This course is recommended for students who have successfully completed level one and are interested in developing their language ability to communicate with a native speaker on new thematic topics relevant to everyday life.

### **7032: FRENCH III: 5 credits Grades 10-12**

*Prerequisites: French II and/or teacher recommendation*

This course is taught in French. Students will work to sharpen their reading, writing, listening, and speaking skills toward an Intermediate-Low proficiency level. Emphasis is placed on using simple sentences independently to express needs, preferences, opinions and suggestions and to state reasons for those opinions and suggestions. Students will be able to independently express themselves with the target language by combining and recombining learned language structures and vocabulary, expressing personal ideas and justifications.

### **7033: FRENCH III HONORS: 5 credits Grades 10-12**

*Prerequisites: French II and/or other multiple assessments*

This course is taught in French. Students will work to sharpen their reading, writing, listening, and speaking skills toward an Intermediate-Low proficiency level. Emphasis is placed on using simple sentences independently to express needs, preferences, opinions and suggestions and to state reasons for those opinions and suggestions. Students will be able to independently express themselves with the target language by combining and recombining learned language structures and vocabulary, expressing personal ideas and justifications. This course has a particular focus on developing literary expression through an introduction to authentic French literature.

### **7042: FRENCH IV HONORS: 5 credits Grades 10-12**

*Prerequisites: French III with 80% or above, French IIIH, and/or teacher recommendation*

This advanced-level course is taught in French. Students will interact with one another in the target language in order to build fluency and Intermediate-Mid proficiency in reading, writing, listening, and speaking. Emphasis is placed on developing spontaneous use of language around familiar topics, and

particular focus is placed on literacy skills. Cultural products and practices of the francophone are explored to enrich students' understanding and appreciation of diverse perspectives.

**7060: AP FRENCH: 5 credits Grade 12**

*Prerequisites: French IV Honors with an >80% and/or other multiple assessment criteria This is an advanced language course.*

This course refines and further develops the four basic language acquisition skills for communication. The understanding, speaking, reading, and writing experiences are designed to promote effective communication in the target language. The students will read and comprehend themes in both factual and interpretive texts. This course is recommended for students who are interested in a fast-paced and challenging college level course to develop the ability to read, write, and analyze the language. Students in this course will receive preparation for the AP Exam.

**7062: SPANISH I: 5 credits Grades 9-12**

Spanish I presents students to basic domains of the target language; speaking, listening, reading, and writing. The use of the Spanish language will be stressed in practical situations along with the gradually advancing study of grammar. A general knowledge of the geography and lifestyles of the Spanish-speaking people of Mexico and Puerto Rico will be integrated into the course through the use of thematic units, video and audio programs, and outside resources, such as magazines, films, and music.

**7072: SPANISH II: 5 credits Grades 9-12**

*Prerequisites: Spanish I and/or other multiple assessments*

Students will build upon communication skills acquired in level one. Emphasis is placed upon expanding knowledge and more advanced communication. Appreciation of Spanish customs and culture will continually develop. This course is recommended for students who are interested in developing the language ability to communicate with a native speaker on topics previously studied.

**7073: SPANISH II HONORS: 5 credits Grades 9-12**

*Prerequisites: Spanish I with an average of >90% and/or other multiple assessment criteria Spanish II Honors continues to build upon and further develop the four basic language acquisition skills for expression in Spanish.*

This course is recommended for students who have successfully completed Spanish I and are interested in a fast-paced in-depth study to develop an ability to speak, read, and write in Spanish.

**7081: SPANISH III: 5 credits Grades 9-12**

*Prerequisites: Spanish II/ Spanish II Honors*

This course continues to build upon and further develop the four basic language acquisition skills for expression in the target language. The course emphasizes the expansion of vocabulary, the refinement of grammatical structures and the ability to speak, read, and write.

**7082: SPANISH III HONORS: 5 credits Grades 9-12**

*Prerequisite: Spanish II Honors with an average of >80% and/or other multiple assessment criteria*  
Spanish III Honors continues to build upon and provide intensive training in the four basic language acquisition skills for clear, concise, and refined expression in Spanish.

**7092: SPANISH IV HONORS (with CEP option): 5 credits Grades 10-12**

*Prerequisites: Spanish III with an average of >90%, Spanish III Honors with an average of >80%, or Spanish II for Native Speakers with an average of >90% and/or other multiple criteria*

This is the beginning of advanced language study. This course continues to build upon and further develop the four basic language acquisition skills for communication. The course emphasizes a thorough review of grammar, a detailed study of history, culture, and the reading of various types of literature.

**7101: AP SPANISH LANGUAGE & CULTURE: 5 credits Grades 11-12**

*Prerequisites: Spanish IV Honors with an average of >80% and/or other multiple assessment criteria*

This is a rigorous language acquisition course designed to provide students with the necessary skills and intercultural understanding that will enable them to communicate successfully in a Spanish-speaking environment. The course is taught exclusively in Spanish and requires students to improve their proficiency across the three modes of communication. The course focuses on the integration of authentic resources including online print, audio, and audio-visual resources, as well as traditional print resources that include literature, essays, magazines and newspaper articles to provide a diverse learning experience. Students communicate using rich, advanced vocabulary and linguistic structures as they build proficiency in all modes of communication toward the pre- advanced level while exploring the AP themes.

**7105: SPANISH I FOR NATIVE SPEAKERS HONORS: 5 credits Grades 9-12**

*Prerequisites: Native speaker and a basic command of Spanish grammar.*

This course is designed for native speakers of Spanish and can accommodate students from a wide range of backgrounds and students who possess various levels of proficiency in Spanish. This course focuses on the development of communicative competence in reading, writing, speaking and listening, as well as on understanding Hispanic cultures and issues of identity of heritage speakers of Spanish in the United States.

**7111: AP SPANISH LITERATURE & CULTURE: 5 credits Grades 11-12**

*Prerequisites: Spanish IV Honors with an average of >80% and/or other multiple assessment criteria*

This course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students continue to develop proficiencies across the full range of the modes of communication (interpersonal, presentational, and interpretive), honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, and literary criticism).

**7106: SPANISH II FOR NATIVE SPEAKERS' HONORS: 5 credits Grades 9-12**

*Prerequisites: Native speaker and a basic command of Spanish grammar, Spanish 1 for Native Speakers, or placement.*

This course is designed for native speakers of Spanish. This course can accommodate students from a wide range of backgrounds and students who possess various levels of proficiency in Spanish. This course continues to build upon and further develop the communicative competence in reading, writing, speaking and listening, as well as on understanding Hispanic cultures and issues of identity of heritage speakers of Spanish in the United States.

**7112: LATIN I: 5 credits Grades 9-12**

Students will develop a flexible command of the language through reading, conversation, and composition. Reading and grammar drills are stressed at the beginning of this course. Customs and cultural contributions are taught through the text, films, special projects, and displays.

**7113: LATIN II: 5 credits Grades 10-12**

*Prerequisite: Latin I*

Students will expand upon the communication skills learned in Latin I. Emphasis is placed upon expanding knowledge of grammar through drills and rudimentary composition. Students will continue to develop their understanding of Roman customs and culture.

**7132: LATIN III HONORS: 5 credits Grades 11-12**

*Prerequisite: Latin II with an average of >90%*

Students will build upon communication skills learned in Latin II. Emphasis is placed upon comprehension of more complex prose leading to original material. The chronology of Roman history is illustrated through readings of original material.

**7145: MYTHOLOGY: 2.5 credits Grades 9-12**

Students will get acquainted with the main themes and motives of classical mythology. Students will learn to analyze and evaluate many inspiring and fascinating stories of love, adventure and horror transmitted to us by ancient authors.

**7153: AP LATIN: 5 credits Grade 12**

*Prerequisites: Completion of Latin III H with an 80 or above, or a recommendation from the teacher.*

Students will develop an appreciation for Roman Literature through reading original prose and poetry.

Reading is emphasized at the beginning of the course. Literary contributions of important Roman writers will be discussed. Literary texts will be analyzed in preparation for the AP exam.

## **BILINGUAL EDUCATION and ENGLISH as a SECOND LANGUAGE**

Students enrolled in the English as a Second Language Program, not only take ESL courses but are also supported via course offerings in other departments. These courses are designed specifically to support English Learners. Additionally, Spanish-speaking students at the beginning levels of English Language Development will be able to access Mathematics content in bilingual classes.

### **ENGLISH AS A SECOND LANGUAGE (ESL)**

These courses are designed for English Language Learners to gain proficiency in English through the WIDA Standards (the Language of Math, the Language of Science, the Language of Language Arts, and the Language of Social Studies), while at the same time developing skills in listening, speaking, reading and writing. Courses are offered at four different levels of English Language proficiency as defined by the ACCESS for ELLs or the WAPT. The goal of these courses is to fully prepare students to be successful in English speaking content classrooms and to develop students' skills in the full range of language arts.

**7265: ESL 1: 5 credits Grades 9-12**

This course is crafted for students at the very beginning levels of English Language Development and offers a high level of support via a double block. Focus in this course will be for students to improve both receptive and productive language skills. Students will develop reading, vocabulary, and oral and written language as they study various themes in different literary genres. Focus will be placed on the acquisition of academic skills, such as: argumentative writing and writing conventions, elements of literature, figures of speech, inferences, main ideas and details. Units explored include: Aiming for Success: Skills and Tools for a Successful School Year, A Changing World, Man vs. Nature: Natural Disasters, Elements of Literature and Literature of Survival.

**7285: ESL 2:5 credits Grades 9-12**

Students at this level of English Language Proficiency receive a high level of support in their English Language Development by meeting for two periods daily. Students will continue their development of reading and writing and will also focus on listening and speaking. Instruction will focus on the structure of the written text, mechanics of language and vocabulary development via narratives. Examples of units are: Heroes, Careers and Occupations, and Endangered Animals.

**7195: ESL 3: 5 credits Grades 9-12**

This course is offered to students who are at a low intermediate level of English proficiency and is taken concurrently with a grade level English class. Its goal is to support the development of students' abilities in all the language arts via literature of different types and cross-curricular themes such as Immigration, Career and Current Events and The American Dream.

**7205: ESL 4: 5 credits Grades 9-12**

Students at a high intermediate level of English proficiency will take this course concurrently with a grade level English class. Although this course is meant to support and expand students' abilities in all the language arts through exploration of literature of different times, it places emphasis on the development of Reading, Writing, Listening and Speaking. Cross-curricular units such as Literature: High School Life, American Dream Foundations, Current Events: Social Media, and Respect and Rights will be the vehicle for the development of the language arts.

**7215: ESL 5: 5 credits Grades 9-12**

Students at an advanced level of English proficiency will take this course concurrently with a grade level English class. It is intended to support and develop students' abilities in all the language arts through exploration of literature of different genres and it places emphasis on the development of Reading, Writing, Listening and Speaking. Cross-curricular units such as The Art of Argument Across Content Areas, Persuasion Across Time and Space and Coming of Age: Confronting Truths will be the vehicle for the development of the language arts.

**7295: BILINGUAL LITERACY I: 5 credits Grades 9 - 12**

*Prerequisites: Results of native language (Spanish) Literacy assessments and teacher recommendation.* For Spanish speakers with English Proficiency levels of 1 - 2. Students will participate in this comprehensive course, which is literature-based and ensures that they will experience the full range of language arts: reading, writing, speaking, listening, and media literacy. Students will improve their skills in reading, vocabulary, oral and written language, as they study various themes anchored in different literary genres and writing styles. This course is taught in Spanish.

**7296: BILINGUAL LITERACY II: 5 credits Grades 9 - 12**

*Prerequisites: Results of native language (Spanish) Literacy assessments and teacher recommendation.* For Spanish speakers with English Proficiency levels of 1 - 3. This language arts course is literature based and places an emphasis on building bilingualism. Although the course is meant to support and expand students' reading comprehension in Spanish, it places emphasis on the development of Reading, Writing, Listening, and Speaking in both Spanish and English. Students will experience the full range of language arts through the study of cross-curricular units that explore global themes through an informational, mythological, and magical realism lens. This course is taught in Spanish and English.

**7310: ESL Reading 1: 5 credits Grades 9-12**

*Prerequisite: Teacher recommendation*

This course is intended for English Learners at the high school level who require explicit literacy instruction in English and who are enrolled in ESL 1 and ESL 2 courses. Students will be provided reading materials to match their functional reading levels and be provided direct instruction in order to progress through levels, while at the same time be exposed to grade level standards. Students will be able to improve reading skills in English, develop foundational reading skills, transfer language arts skills to grade level ELA courses, improve writing skills, and improve usage of language mechanics, vocabulary and spelling. Students will experience the full range of language arts through the study of cross-curricular units such as: Understanding narratives through Storytelling, Analyzing Hate and Arguing for Change.

**7320: ESL Reading 2: 5 credits Grades 9-12**

*Prerequisite: ESL Reading 1 and teacher recommendation*

This course is intended for English Learners at the high school level who require explicit literacy instruction in English and who are enrolled in ESL 1, ESL 2, and ESL 3 courses. Students will be able to continue to improve reading skills in English including continued development of foundational reading skills, writing skills with emphasis on developing clear and concise informational texts, and improve language mechanics, vocabulary and spelling. Students will experience the full range of language arts through the study of cross-curricular units such as: Global Storytelling through Mythology, Perception, Society and Forces of Nature and Understanding Reality through Magical Realism.

**7300: New Beginnings in the 21st Century: 5 credits Grades 9-12**

*Prerequisite: By Recommendation Only*

This course is intended for students who have recently arrived in the United States at the high school level who would benefit from transitional instruction on schooling in the US. The goal of this course is to facilitate a safe, nurturing, and informative transition to schooling in a new country (the US) that promotes student success. Units of study are interdisciplinary and promote cultural awareness while integrating skills in Listening, Reading, Writing and Speaking English.

**2290 BILINGUAL ALGEBRA IA: 5 credits Grade 9**

*Prerequisites: Teacher recommendation based on middle school math performance.*

The fundamental purpose of this course is to formalize and extend the math that students learned in the middle grades. Students will deepen and extend their understanding of linear relationships by using quantities to model and analyze situations, to interpret expressions, and create linear equations and inequalities to describe situations and analyze solutions in context. Students will apply linear models to data that exhibit a linear trend, learn function notation, develop the concepts of domain and range and interpret linear and nonlinear functions. Students will perform operations on polynomial expressions.

**2300: BILINGUAL ALGEBRA I: 5 credits Grade 9**

For Spanish speakers with English Proficiency levels of 1 or 2. The course content includes activities that focus on critical areas: (1) Developing fluency writing, interpreting, and translating between various forms of linear equations and inequalities, and using them to solve problems; (2) Learning function notation and language for describing characteristics of functions, explore many examples of functions, and interpret functions, given graphically, numerically, symbolically, and verbally, translate between representations, and understand the limitations of various representations. They compare and contrast linear and exponential functions, distinguishing between additive and multiplicative change. (3) Using regression techniques to describe relationships between quantities. (3) Comparing the key characteristics of quadratic functions to those of linear and exponential functions and select from among these functions to model phenomena. Problem-solving skills and procedures similar to those emphasized on district assessments, the NJSLA and the SAT/ACT will be an integral part of this course.

**2350: BILINGUAL GEOMETRY: 5 credits Grades 9-12**

*Prerequisite: Algebra I or 8th Grade Algebra I with a final grade of 75% -79%.*

For Spanish speakers with English Proficiency levels of 1 or 2. The fundamental purpose of Geometry is to formalize and extend students' geometric experiences from the middle grades. Transformations, triangle congruence conditions, dilations and proportional reasoning, similarity, extending the notions of two- and three-dimensional objects, scale factors of area and volume to construct informal arguments to explain formulas, circles, the relationship among segments on chords, secants and tangent, and theorems about circles are critical areas of focus for the course. Problem-solving skills and procedures similar to those emphasized on district assessments, the NJSLA and the SAT will be an integral part of this course.

**2366: BILINGUAL ALGEBRA II: 5 credits Grades 10-12**

*Prerequisites: Algebra I and Geometry or Geometry Honors with a final grade less than 80% and/or teacher's recommendation.*

For Spanish speakers with English Proficiency levels of 1 or 2. Building on the understanding of linear, quadratic, and exponential functions from Algebra I, the fundamental purpose of Algebra II is to extend function concepts to include polynomial, rational, radical, exponential, and logarithmic functions. Similarities of arithmetic with rational numbers and the arithmetic with rational expressions, functions, specifically polynomial, rational, radical, and exponential functions, transformations on graphs of functions and functions as models for solving problems, extend students' previous trigonometry to model periodic phenomena and different types of data distributions, samples, surveys, experiments and simulations are critical areas of instructional focus within the course. Problem solving skills and procedures similar to those emphasized on district assessments, the NJSLA and SAT/ACT will be an integral part of this course.

**3108: PHYSICS ESL: 5 credits Grades 9-12**

This course will focus mainly on the conceptual approach to two key strands of the Physics Standards- motion and forces and energy transformations. The topics will include motion, work, power, and energy; momentum; electrostatics; circuits; energy, motors; generators and transformers; radioactivity and nuclear fission; power generation. Construction of knowledge is emphasized through experimentation and cooperative group projects. This is a college preparatory course.

**3210: CHEMISTRY ESL: 5 credits Grades 10-12**

This course is a conceptual approach to understanding structure and properties of matter and chemical reactions. Students will be required to use exponentials for large and small numbers, and direct and inverse mathematical relationships. Units of study include states of matter; reactions and reaction rates; atoms, isotopes & ions; chemical bonding; mole quantities; gas laws; solutions; acids & bases; organic chemistry. The laboratory experiences serve to illustrate and reinforce topics covered in the classroom.

**3310: COLLEGE PREP BIOLOGY ESL: 5 credits Grades 9-12**

*Prerequisites: 75% or better in CP Chemistry.*

For Multilingual Learners at levels 1 -3, this course is offered in a co-taught, sheltered English setting. This course is designed to meet the Next Generation Science Standards in Life Science. This laboratory class is designed for those students who wish to continue their preparation in the sciences for college entry. All topics identified in Biology will be explored but at a faster pace, with more in-depth discussions and activities.

**4145: UNITED STATES HISTORY I ESL: 5 credits Grades 9-12**

The main focus of the course is the improvement of oral and written communication, reading comprehension, and skills in social studies. Presented with a survey approach, students are exposed to major personalities and events in the history of the United States from the time of European exploration to the McKinley Administration. Students are given the opportunity to study cause and effect relationships, to recognize and explain turning points in American History, and trace areas of conflict to current problems. New Jersey history and the contributions of various minorities is integral.

**4044: A CHANGING WORLD ESL: 5 credits Grades 9-12**

*Prerequisites: United States History II*

For Multilingual Learners at levels 1 -3, this course is offered in a co-taught, sheltered English setting. This course provides a study of the history of an increasingly interdependent world, while examining the complexities and diversity of today's global societies and world geography. Students will be provided an opportunity to understand the geographic influences on the development of world cultures; the relationship between the political, social, economic, and religious factors in foreign countries; and the relationship between the history of one nation to world history. In addition to the standard program, A Changing World is offered to students at an honors level and Advanced Placement level.

**4155: UNITED STATES HISTORY II ESL: 5 credits Grades 11-12**

This course is delivered in an integrated setting. This course provides a chronological study of the social, economic, and political experiences of a developing United States from the period of the great depression through today. Students are given the opportunity to study cause and effect relationships, to recognize and explain turning points in American History, and to trace areas of conflict to current problems. New Jersey History and the contributions of various minorities are an integral part of this course. Focus in the course is placed on the improvement of oral and written communications skills, reading comprehension and skills in Social Studies.

# ELECTIVE PROGRAMS 2024-2025

## 21<sup>ST</sup> Century Life Skills & Careers

### **Business Technology**

Accounting I  
Accounting II  
Sports and Entertainment Marketing  
Fashion Marketing  
Computer Applications I  
Computer Application II  
Entrepreneurship  
Personal Finance  
Supply Chain Management  
Marketing I- III  
Business: An Introduction  
Learning Strategies  
Independent Study in Early Childhood Honors  
Fashion and Design

### **Consumer and Family Science**

Early Childhood Laboratory  
Child Development/Parenting

### **Health & PE**

JROTC I-IV

### **Science**

Overview of Engineering Robotics  
Scientific Programming

### **Technology**

Design Technology  
Advanced Design Technology  
Introduction to Architecture  
Introduction to Aviation  
Computer Animation & Web Design I  
Computer Animation & Web Design II  
Computer Animation & Web Design III  
Computer Animation & Web Design IV  
Computer Science 1 -3  
AP Computer Science Principles

## Fine, Visual, and Performing Arts

### **Televisions Production**

Introduction to Aspects of Video

### **Dance**

Integrated Dance

Aspects of Video Production I  
Aspects of Video Production II  
Acting for Film and Television Honors  
WANT TV Independent Study

**Drama**

Introduction to Drama  
Drama II  
Drama III  
Drama IV  
Musical Theater

**Art**

Art IA  
Art IB  
Art II Honors  
Art III Honors  
Art IV Honors  
AP Art History  
Commercial Art-Photography I  
Commercial Art-Photography II  
Commercial Art-Photography III  
Commercial Art-Photography IV  
Introduction to Jewelry and Metalworking  
Jewelry and Metalworking II  
Jewelry and Metalsmithing III  
Jewelry and Metalsmithing IV  
Drawing  
Cartooning and Animation I  
Cartooning and Animation II  
Sculpture I  
Sculpture II  
Advanced Sculpture Studio  
Beginner Ceramics  
Advanced Ceramics  
Murals and Mosaics  
3D Computer Graphics I  
3D Computer Graphics II  
Digital Careers

Beginner Dance  
Intermediate dance  
Advanced Dance Honors  
Boy's Dance  
Technique I-III  
The Company Honors

**Music**

Freshman Band  
Freshman Band Honors  
Symphonic Band  
Symphonic Band Honors  
Wind Ensemble  
Wind Ensemble Honors  
Concert Choir Honors  
Voice Class  
Freshman Orchestra  
Orchestra Honors  
Guitar I  
Guitar II  
Guitar III  
Jazz and Classical Guitar Honors  
Percussion Performance I & II  
Music Keyboard I  
Music Keyboard II  
Piano Honors  
Advanced Piano  
AP Music Theory

**Important Scheduling Dates**

Registration Orientations

- Parents- Class of 2028

January 18, 2024

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|--|---|
| ● Students- Class of 2028                | January 17 & 18, 2024                                   |
| ● Students- Classes of 2025-2028         | January 23-26, 2024                                     |
| Final Course Recommendations by Staff    | February 16, 2024                                       |
| Course Requests Verified                 | April 2024  |
| Course Selection with Counselors         | February- March 2024                                    |
| Option II Deadline                       | May 10, 2024  |
| Course Waiver Deadline                   | June 28, 2024   |
| Course Request Deadline                  | June 28, 2024   |
| Pass/Fail and Audit Deadline             | September 27, 2024                                      |
| Add a Semester Elective/Course Deadline  | September 20, 2024<br>(S1), 2nd week of Semester 2 (S2) |
| Add a Full Year Elective/Course Deadline | September 27, 2024                                      |
| Drop a Course without Penalty Deadline   | September 27, 2024                                      |