

# JAMES CALDWELL HIGH SCHOOL



## PROGRAM OF STUDIES 2021-2022

265 Westville Avenue  
West Caldwell, NJ 07006  
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It is the policy of the Caldwell-West Caldwell District not to discriminate on the basis of race, color, creed, religion, sex, ancestry, national origin, or social or economic status in its educational programs or activities and employment policies as required by Title IX of the Education Amendments of 1972 and N.J.A.C. 6:4-1.1 et seq.

Direct inquiries regarding compliance to:

Ms. Elizabeth Fisher  
Affirmative Action Officer at  
James Caldwell High School  
265 Westville Avenue  
West Caldwell, NJ 07006

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Dr. Christopher Trause, World Languages

# MESSAGE FROM THE PRINCIPAL

Dear James Caldwell High School Students:

This *Program of Studies* is the map that will guide you on your high school journey. Like all successful adventurers, your journey begins with a dream. Cultivate a clear vision of the person you aspire to be academically, socially, and emotionally, and then use this handbook to map out the route that will provide you with the opportunities and experiences to realize your dream.

The Caldwell-West Caldwell Board of Education is committed to providing you with the essential resources, opportunities, and experiences that will foster and challenge you to achieve your greatest potential as a lifetime, self-directed learner; a critical and creative thinker; and a responsible, productive citizen. With this mission in mind, James Caldwell High School has developed a comprehensive curriculum to meet the academic needs and interests of all its students. The trick to navigating through so many options is to keep your dream in focus while thoughtfully considering the path you take. I recommend selecting the most challenging classes available to you, keeping in mind your unique abilities. It is also important, however, to develop a well-rounded plan that allows you to explore areas of interest and maintain a balanced and healthy lifestyle. Embrace the excitement of charting this path as you are on a journey of wonder and opportunity.

Remember, you will never be alone on this adventure. James Caldwell High School is home to talented, caring and knowledgeable educators who will serve as a priceless resource for you. If you have a question about the many possibilities that await you, or hit a roadblock along the way, know that we are here to guide you. By working collaboratively, we can help you discover your true potential and coach you through the many challenging high school academic and co-curricular experiences, so you may achieve success as it is ultimately defined by you.

Best wishes for an exciting and fulfilling school year,

Mr. James Devlin  
Principal

# GRADUATION REQUIREMENTS

In order to graduate from James Caldwell High School, a student must pass the NJSLA and earn 120 credits (130 credits for Class of 2023 and beyond). Students in Grades 9 and 10 are required to carry 40 credits and students in Grades 11 and 12 are required to carry at least 35 credits. It is strongly recommended that students carry a full schedule of 40 credits in order to remain academically competitive for college admission. In grades 9, 10, 11 and 12 students are expected to meet the following minimum course requirements:

1 year of English for each year of attendance

1 year of Physical Education/Health for each year of attendance

3 years of Mathematics

1 year of World Cultures

2 years of United States History

3 years of Science

1 year of a Visual or Performing Art

1 year of a Practical Art

1 year of a World Language (2 years of a World Language Class of 2023 and beyond)

½ year of Personal Finance & Literacy or Economics

◆ All Fine Arts and Music classes meet the Visual and Performing Arts requirement. All Family & Consumer Science classes, Industrial Arts & Technology, and Business classes meet the Practical Arts requirement.

◆ The remaining credits are to be chosen from the elective course offerings.

◆ The establishment of minimum curricular proficiencies in courses required for graduation shall be developed and implemented by the administration in cooperation with the faculty and approved by the Board of Education. Minimum proficiencies required for each course shall be consistent with the policies and procedures defined in N.J.A.C. 6:8-4.2. The proficiencies required for graduation shall be described to students, parents and guardians at the beginning of all course work.

◆ Under unique circumstances, programs for special education students may be adjusted in order to meet the requirements stated above.

N.J.S.A. 18A:7A-1 et seq.; 18A:33-1; 18A:35-7; N.J.A.C. 7:8-4.2

## PLANNING A COURSE OF STUDY

A. Total credits required for graduation: 120 (130 – Class of 2023 and beyond)

### Grade level requirements:

**Rising Sophomores should have completed 35 credits (40 Class of 2023 and beyond).**

**Rising Juniors should have completed 70 credits (80 Class of 2023 and beyond).**

**Rising Seniors should have completed 105 credits (115 Class of 2023 and beyond).**

B. The 4-year graduation time frame becomes seriously jeopardized when students fail required courses, which are usually sequential in nature. **Students who fail a required course should make up the course in summer school immediately in order to graduate on time.** If a course is not offered in summer school, or if the student does not attend summer school, the student will repeat the course the next school year. Students are not permitted to take the next level of a consecutive requirement until the previous course is passed. Honors credit for any course is not available from any summer program.

C. From year to year, certain courses may not be offered if enrollment is lower than expected. Counselors will help students make alternate course selections.

## WHAT MAKES A STUDENT SUCCESSFUL?

One of the most difficult decisions members of a school community are asked to make is whether particular students should or should not elect to take an Honors or Advanced Placement course or start an advanced sequence of courses in a particular subject area. Multiple criteria such as; previous grades, teacher recommendations, standardized test scores and an assessment test in the honors subject area are employed to predict those students who will meet with success in advanced courses. However, we recognize that there are no fool-proof criteria. The following guidelines serve as an accurate description of successful students, and those aspiring to enroll in an advanced program should recognize themselves as they read through the list.

- (1) Successful students want to learn, strengthen their skills, and be challenged.
- (2) Successful students read independently, regularly and widely, and they read quality works of fiction and non-fiction.
- (3) Successful students have a sense of purpose and direction. They have goals for the future and are continually working toward attaining those goals.
- (4) Successful students attend class regularly and are on time. If they miss a session, they let the instructor know why and make sure they get all assignments.
- (5) They take advantage of extra-credit opportunities if offered. They show that they care about grades and are willing to work to improve them.
- (6) They speak in class, asking key questions which show they have been listening.
- (7) They see the instructor before or after class about grades or comments made on their papers and about upcoming tests.
- (8) They turn in all assignments and make them look neat, producing a final product that reflects a caring attitude.

# ACADEMIC ACHIEVEMENT POLICY

The academic achievement of students shall be measured not only in marks and/or grades, such as numerical scores, percentages or letters, but in attainment of well-defined, and Board-approved, instructional goals and objectives. This is the central purpose for which the district exists.

The instructional staff shall develop means of: (1) aiding each student in appraising his or her own progress and utilizing such knowledge in making decisions concerning future educational achievements: (2) informing parents of the achievement progress of their children. The instructional staff reports such achievement using grades, personal conferences, emails, and/or letters.

The issuance of marks and/or grades on a regular basis serves to promote a process of continuous evaluation of student performance, to inform students, parents, and counselors of progress and to provide a basis for bringing about change in student performance, if such change seems necessary.

Eligibility to attend summer school is based on attendance and completion of the course.

## GRADING SYSTEM

The grading system carries the following characteristics:

90 -100 - Indicates excellent achievement

80 - 89 - Good

70 - 79 - Fair

65 - 69 - Poor but passing

Below 65 Failure

## ACADEMIC HONOR ROLLS

High Honor Roll.....Grade Point Average.....93 or above

Honor Roll.....Grade Point Average.....90-92.9

*(no grade lower than 80%)*

# GENERAL COLLEGE PREPARATORY REQUIREMENTS

## Flexibility of Programming

Students and parents are reminded that it is possible to take subjects in vocational and technical areas, family and consumer science, art, and music in combination with college preparatory subjects and still have a sufficient number of credits to enter college. To determine whether or not choices in these areas are appropriate preparation for his/her anticipated college major, a student should consult with his/her counselor. Those who do not intend to enter college directly after high school should consider programs which include marketable skills. If such a student chooses to apply to college in the future, he/she should contact JCHS for his/her transcript.

<b>Years</b>	<b>Subjects</b>
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<b>4</b>	<b>English</b>
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<b>3-4</b>	<b>Social Studies</b>
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<b>3-4</b>	<b>Mathematics</b> (see sequence chart on page 61)
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Most colleges require 3 years of mathematics and many prefer 4 years. Students planning scientific, technical, or engineering work should consider 4-5 courses of mathematics. Students planning liberal arts studies or business administration careers should consider taking the fourth year of mathematics to remain academically competitive.

<b>3-4</b>	<b>Laboratory Sciences</b> (see sequence chart on page 62)
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At least 3 years of laboratory science are preferable. Students planning scientific, technical or engineering work should generally take 4 or more courses of laboratory science.

<b>2-4</b>	<b>World Languages</b>
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The requirements of colleges vary considerably. A few colleges require none, some require only 2 years, and some prefer 3 or 4 years. Generally, it is recommended that students with strong world language aptitude take 3 or 4 years of one world language rather than 2 years of two world languages.

# SUGGESTED PROCEDURES FOR COLLEGE ADMISSION

## JUNIOR YEAR

1. Take PSAT-October
2. Obtain information in the following ways:
  - a. Utilize **Naviance** account.
  - b. View college websites.
  - c. Sign up for selective meetings with college representatives as listed in Naviance.
  - d. Contact students presently attending colleges.
3. Visit Colleges
4. Take SAT and /or ACT. (Spring)
5. Meet with individual counselors to discuss preliminary plans and selections.
6. Conduct a computer search in **Naviance** to develop a working list of colleges.
7. Ask two teachers to write you letters of recommendation. Give them the proper request form.

**NOTE:** The most important factors determining college admissions are: course selections, grades, standardized test scores and activities.

**Some colleges will not consider students for admission if they have a weak senior academic program.**

## SENIOR YEAR

1. Review your preliminary college list with the counselor.
2. Take SAT or ACT.
3. Visit colleges.
4. Fill out applications carefully.
  - a. Pay particular attention to essay questions-style and content.
  - b. THE SCHOOL CODE IS: 311578**
  - c. Follow the special directions designated by each application.
    - i. Most applications require a transcript; some have supplemental forms.
  - d. Submit the required forms to your counselor.
  - e. Do not delay applications for standardized test scores.

**NOTE:** Meeting college deadlines is your responsibility. Taking the SAT and ACT by designated dates is your responsibility.

5. Respond to every offer of admission with a courteous letter. If you decline an admission offer, do so tactfully.
6. If you are caught in a deadline conflict concerning deposits, contact the college admissions office.

# ALTERNATIVES FOR STUDENTS

The following options are available to students at James Caldwell High School. All of them are subject to approval by parents and the school principal. More information and assistance can be obtained from your guidance counselor.

## 1. The Advanced Placement Program:

The Advanced Placement Program is part of the nationwide Advanced Placement Program of the College Board in which many young people can complete college level studies in high school. At present, 18 Advanced Placement courses are offered at James Caldwell High School; AP English Language & Composition, AP English Literature & Composition, AP U.S. History I and II, AP European History, AP U.S. Government and Politics, AP Human Geography, AP Calculus AB, AP Statistics, AP Studio Art, AP Computer Science, AP Computer Science Principles, AP Biology, AP Chemistry, AP Physics C, AP Environmental Science, AP Spanish, and AP Italian. Taking the AP examinations may include the following benefits: exemption by colleges from beginning courses and permission to take higher level courses in certain fields, academic credit for exams taken, and tuition savings. The exams are given in May of each year. Students enrolled in AP courses are strongly encouraged to take the Advanced Placement Examinations for which they will have to assume the cost. In addition to the AP exam, students will be responsible for taking a final exam to receive JCHS credit, unless they qualify for a senior exemption.

## 2. Early Admission to College:

If high school graduation requirements have not been satisfied but a student has passed the NJSLA, a student may enter college early under the 30 College Credit Route Program. A high school diploma from JCHS will **not** be granted; however, the student may apply to the State of N.J. for an equivalency diploma upon successful completion of his or her freshman year in college.

## 3. Work Study Program:

The program offered at JCHS is Cooperative Industrial Education (C.I.E.). Students earn credits towards graduation based upon their assignments. Minimum age for participation is 16 and is open only to seniors.

## 4. Independent Study:

A description of this program is contained in the written procedures for independent study established by JCHS and is available in the Guidance Office. Students are able to pursue more intensive work in their own area of interest, utilizing resources to be found within the school district. All Independent Study courses are graded on a pass/fail basis.

## **5. Vocational Time Share:**

Students have the opportunity to pursue vocational programs at Essex County School of Technology (ECST) in West Caldwell and Morris County Vocational Technical School (MCVTS). Students can opt to take their academic program at JCHS for one-half day and their vocational program during the other half of the day or attend ECST or MCVTS full time.

## **6. Course Audit:**

Students may attend classes in addition to their regular schedule without credit. An audit carries with it the responsibility to attend, take tests and complete all required work. This option is contingent upon teacher approval, class size, availability of equipment, etc.

## **7. Dual Enrollment (DE):**

Dual Enrollment programs allow students to take a college level course in high school and jump start their college career. These courses introduce juniors and seniors to the rigor of college coursework early, and helps prepare them for post-secondary education. Students are able to purchase the credits at a substantially discounted rate. It is up to the discretion of colleges/universities that students pursue after high school as to whether credits are accepted. Dual Enrollment courses will be denoted.

<b>COURSE LISTING</b>	<b>CREDITS</b>	<b>GRADE 9</b>	<b>GRADE 10</b>	<b>GRADE 11</b>	<b>GRADE 12</b>
<b>BUSINESS</b>					
Introduction to Business (DE)	5	X	X	X	X
21st Century Marketing (DE)	5	X	X	X	X
<b>COOPERATIVE INDUSTRIAL ED (CIE)</b>					
CIE	15				X
<b>ENGLISH</b>					
English 9	5	X			
English 10	5		X		
English 10 Honors	5		X		
English 11 Core	2.5			X	
English 12 Core	2.5				X
AP English Language & Composition	5			X	X
AP English Literature & Composition	5				X
Banned Books*	2.5			X	X
From Page to Screen*	2.5			X	X
Monsters in Literature*	2.5			X	X
Prose & Poetry*	2.5			X	X
Reader's Choice*	2.5			X	X
Shakespeare & Popular Imagination*	2.5			X	X
Speakers, Speeches, & Speaking*	2.5			X	X
<i>*English Selective fulfills requirement</i>					
Creative Writing	2.5		X	X	X
Journalism and Publications	2.5/5		X	X	X
Freshman Honors Seminar	5	X			

<b>COURSE LISTING</b>	<b>CREDITS</b>	<b>GRADE 9</b>	<b>GRADE 10</b>	<b>GRADE 11</b>	<b>GRADE 12</b>
<b>FAMILY &amp; CONSUMER SCIENCE</b>					
Basic Foods	2.5	X	X	X	X
International Foods	2.5	X	X	X	X
Interior Decoration	2.5	X	X	X	X
Clothing I	2.5	X	X	X	X
Clothing II	5		X	X	X
Clothing III	5			X	X
Clothing IV	5				X
<b>FINE ARTS</b>					
Introduction to Draw-Paint-Design	2.5	X	X	X	X
Draw-Paint-Design I	5	X	X	X	X
Draw-Paint-Design II	5		X	X	X
Draw-Paint-Design III	5			X	X
Draw-Paint-Design IV	5				X
AP Studio Art	5				X
Computer Graphic Design I	5	X	X	X	X
Computer Graphic Design II	5		X	X	X
Introduction to Ceramics	2.5	X	X	X	X
Ceramics I	5	X	X	X	X
Ceramics II	5		X	X	X
Ceramics III	5			X	X
Ceramics IV	5				X
Digital Photography I	5	X	X	X	X
Digital Photography II	5		X	X	X
Art History	2.5			X	X

<b>COURSE LISTING</b>	<b>CREDITS</b>	<b>GRADE 9</b>	<b>GRADE 10</b>	<b>GRADE 11</b>	<b>GRADE 12</b>
<b>INDUSTRIAL ARTS &amp; TECHNOLOGY</b>					
Architectural Design	2.5	X	X	X	X
Introduction to Technology	2.5/5	X	X	X	X
Fundamentals of Engineering	5		X	X	X
Computer Aided Design	5	X	X	X	X
Computer Science	5	X	X	X	X
AP Computer Science A	5		X	X	X
AP Computer Science Principles	5		X	X	X
Mobile App Development	2.5		X	X	X
Web Development	2.5		X	X	X
Robotics & Control	5		X	X	X
Introduction to Woodworking	2.5	X	X	X	X
Woodworking I	5	X	X	X	X
Cabinet Making & Furniture Design	5		X	X	X
Woodworking in the 21st Century	5		X	X	X
<b>MATHEMATICS</b>					
Algebra I	5	X			
Algebra I Concepts	5	X			
Geometry	5	X	X		
Geometry Concepts	5		X		
Geometry Honors	5	X	X		
Algebra II	5		X	X	
Algebra II Concepts	5			X	
Algebra II Honors	5		X	X	
Precalculus	5			X	X
Precalculus Honors	5			X	X

<b>COURSE LISTING</b>	<b>CREDITS</b>	<b>GRADE 9</b>	<b>GRADE 10</b>	<b>GRADE 11</b>	<b>GRADE 12</b>
<b>MATHEMATICS (continued)</b>					
Calculus	5				X
AP Calculus AB	5				X
Mathematical Analysis	5				X
Statistics	5				X
AP Statistics	5			X	X
<b>MUSIC AND THEATER</b>					
Musical Performance: Band	5	X	X	X	X
Musical Performance: Chorus	5	X	X	X	X
Musical Performance: Orchestra	5	X	X	X	X
Introduction to Guitar, Keyboard & Music Theory	5		X	X	X
Introduction to Theater	2.5	X	X	X	X
Theater I	2.5	X	X	X	X
<b>PHYSICAL EDUCATION</b>					
Physical Education 9/Health - Safety	5	X			
Physical Education 10/Driver's Ed.	5		X		
Physical Education 11/Health - Safety	5			X	
Physical Education 12/Health - Safety	5				X
<b>SCIENCE</b>					
Investigations in Biology	6	X			
Biology I	6	X			
Advanced Biology	6			X	X

<b>COURSE LISTING</b>	<b>CREDITS</b>	<b>GRADE 9</b>	<b>GRADE 10</b>	<b>GRADE 11</b>	<b>GRADE 12</b>
<b>SCIENCE (continued)</b>					
AP Biology	6			X	X
Investigations in Chemistry & Physics	6		X		
Chemistry I	6		X		X
Chemistry Honors	6		X		
Advanced Chemistry	6			X	X
AP Chemistry	6			X	X
Physics	6			X	X
AP Physics C	6			X	X
Environmental Science	6			X	X
AP Environmental Science	6			X	X
Research in Molecular Biology (DE)	6			X	X
Anatomy & Physiology (DE)	3			X	X
Marine Biology (DE)	3			X	X
Forensic Science (DE)	3			X	X
Organic Chemistry	3			X	X
<b>SOCIAL STUDIES</b>					
Freshman Honors Seminar	5	X			
World Cultures	5	X			
United States History I	5		X		
AP United States History I	5		X		
United States History II	5			X	
AP United States History II	5			X	
Personal Finance & Literacy	2.5		X	X	X
Economics	2.5			X	X

<b>COURSE LISTING</b>	<b>CREDITS</b>	<b>GRADE 9</b>	<b>GRADE 10</b>	<b>GRADE 11</b>	<b>GRADE 12</b>
<b>SOCIAL STUDIES (continued)</b>					
Legal Studies	2.5			X	X
Supreme Court	2.5			X	X
Introduction to Sociology (DE)	2.5		X	X	X
American Diplomatic History	2.5			X	X
Human Behavior	2.5		X	X	X
Political Theory	2.5		X	X	X
Holocaust and Genocide (DE)	2.5			X	X
AP Human Geography	5		X	X	X
AP European History	5			X	X
AP US Government & Politics	5				X
<b>WORLD LANGUAGES</b>					
Spanish Communication and Culture I	5	X	X	X	X
Spanish Communication and Culture II	5		X	X	X
Spanish Communication and Culture III	5			X	X
Spanish I	5	X	X	X	X
Spanish II	5	X	X	X	X
Spanish III	5		X	X	X
Spanish IV	5			X	X
Spanish V	5				X
AP Spanish	5				X
Italian I	5	X	X	X	X
Italian II	5	X	X	X	X
Italian III	5		X	X	X
Italian IV	5			X	X
AP Italian	5				X

<b>COURSE LISTING</b>	<b>CREDITS</b>	<b>GRADE 9</b>	<b>GRADE 10</b>	<b>GRADE 11</b>	<b>GRADE 12</b>
<b>WORLD LANGUAGES (continued)</b>					
Latin I	5	X	X	X	X
Latin II	5		X	X	X
Latin III	5			X	X
Latin IV Honors (DE)	5				X
Classical Mythology	2.5	X	X	X	X

# ***COURSE DESCRIPTIONS***

## **BUSINESS**

<b>BUSINESS</b>	<b>Grade(s) Offered</b>	<b>Credits</b>
Introduction to Business (DE)	9, 10, 11, 12	5
21st Century Marketing (DE)	9, 10, 11, 12	5

### **INTRODUCTION TO BUSINESS (DE)**

**Grade**.....9, 10, 11, 12

**Credits**.....5

**Prerequisite**.....None

This course focuses on the dynamics of business in a changing economy. Introduction to Business is designed to provide students with a background in all areas of business management including marketing, management, finance, economics, and business ethics. Topics include the global economy, free enterprise system, entrepreneurship, financial markets such as the stock market, consumer banking and money issues. This course fulfills the state requirement for Personal Financial Literacy. This is a Dual Enrollment (DE) course through Fairleigh Dickinson University. The classroom teacher will provide information on how interested students can register with the university for 3 college credits.

### **21ST CENTURY MARKETING (DE)**

**Grade**.....9, 10, 11, 12

**Credits**.....5

**Prerequisite**.....None

This class is designed to apply marketing concepts to trends in the real world. The class teaches students marketing foundations, strategies and functions through application based projects. The topics covered include, but are not limited to market segmentation, political and economic influences, marketing skills, promotion, and product and service management. Students can use the information learned in this class to become a more informed, proactive consumer, as well as to set the stage for further study, and a career in marketing. This is a Dual Enrollment (DE) course through Fairleigh Dickinson University. The classroom teacher will provide information on how interested students can register with the university for 3 college credits.

# COOPERATIVE INDUSTRIAL EDUCATION

## **Meets the Practical Arts requirement**

**Qualified students must be 16 years of age and a senior.**

1. Be willing to work on a regular basis no less than 500 hours per year.
2. Provide own transportation to the place of employment.
3. Under normal conditions, be continuously employed throughout the school year.
4. Complete all graduation requirements.
5. Maintain open communication with the coordinator, school faculty and administrators.
6. Adhere to both school and program rules and regulations.
7. Be appropriate in appearance.
8. Observe safety practices in all aspects of traveling and working.
9. Maintain good attendance.
10. Have applied for a social security number.
11. Students will be scheduled for four courses each semester in order to ensure a reasonable work schedule.

## **The program provides for:**

1. Occupational information and guidance on a group and individual basis.
2. Assistance to the student in identifying and locating suitable employment opportunities.
3. The teacher coordinator to work closely with the employer to make sure that the student is:
  - a) adjusting to the job
  - b) following an approved job experience program
  - c) properly supervised
  - d) provided adequate safety instruction on-the-job
  - e) progressing satisfactorily

## **C.I.E. (COOPERATIVE INDUSTRIAL EDUCATION)**

**Grade..... 12**

**Credits.....15**

**Prerequisite.....Interest in Industrial Occupational Training**

CIE is a program which allows the pupil to spend half-time in school and half-time on the job under supervision by the school. Employment at a certified training station and a minimum 500 work hours per year is required for credit. Employment opportunities are available in industrial occupations, manipulative trades, business, office occupations and skill trades.

# ENGLISH

ENGLISH	Grade(s) Offered	Credits
English 9	9	5
English 10 and English 10 Honors	10	5
English 11 - First Semester Core	11	2.5
English 12 - First Semester Core	12	2.5
AP English Language & Composition	11, 12	5
AP English Literature & Composition	12	5

**The junior and senior English requirement (5 credits each) consists of a core & selective or full year AP course**

ENGLISH SELECTIVE COURSES	Grade(s) Offered	Credits
Banned Books	11, 12	2.5
From Page to Screen	11, 12	2.5
Monsters in Literature	11, 12	2.5
Prose and Poetry	11, 12	2.5
Reader's Choice	11, 12	2.5
Shakespeare & Popular Imagination	11, 12	2.5
Speakers, Speeches, and Speaking	11, 12	2.5
ENGLISH ELECTIVE OFFERINGS	Grade(s) Offered	Credits
Creative Writing	10, 11, 12	2.5
Journalism and Publications	10, 11, 12	2.5/5

## ENGLISH 9

**Grade.....9**  
**Credits.....5**  
**Prerequisite.....None**

English 9 is taught in conjunction with World Cultures. This course is intended to provide an interdisciplinary, humanities-based program for ninth graders which will allow students to study a number of different cultures from several viewpoints and from the disciplines of social studies, literature, and the arts. The politics, history, culture, economics, and social structures of these peoples will be investigated to understand their contributions to world culture. Students will develop and utilize analytical skills and research techniques through the integration of skills in reading, writing, expression, usage, and vocabulary.

## ENGLISH 10 AND ENGLISH 10 HONORS

<b>Grade</b> .....	<b>10</b>
<b>Credits</b> .....	<b>5</b>
<b>Prerequisite</b> .....	<b>English 9</b>

This course is designed to provide a multi-faceted approach to various works written by American authors and a unit on a Shakespearean tragedy. Core authors may include Mark Twain, Harper Lee, Arthur Miller, J.D. Salinger, and Maya Angelou. Goals of the program include development of skills in writing, reading, literary analysis, speaking, listening, viewing, vocabulary usage, use of technology and research techniques. The Honors class will follow the same course of study as the English 10 classes in more depth, at a faster pace, and by reading more literature. Additionally, greater responsibility will be placed upon students for their own learning. **Admission to the English 10 Honors class is through a departmental assessment process only.**

## ENGLISH 11 - FIRST SEMESTER CORE

<b>Grade</b> .....	<b>11</b>
<b>Credits</b> .....	<b>2 ½</b>
<b>Prerequisite</b> .....	<b>English 10</b>

English 11 will focus upon solidifying students' skills in the five core content areas of reading, writing, speaking, listening, and viewing. Students will study literature written by non-American writers including a tragedy by William Shakespeare. Completion of a formal research paper is required.

## AP ENGLISH LANGUAGE AND COMPOSITION

<b>Grade</b> .....	<b>11, 12</b>
<b>Credits</b> .....	<b>5</b>
<b>Prerequisites</b> .....	<b>English 10 or English 11 and application process</b>

This Advanced Placement course in English Language and Composition is primarily a course in effective writing and critical reading and assumes a command of Standard English grammar. The intent of the course is to foster awareness of the different stylistic effects created by different syntactical choices and by different levels of diction. The course is organized around various modes of discourse and includes works from many genres, both fiction and nonfiction. Constructed in accordance with the guidelines described in the AP English Language and Composition Course Description, the emphasis of the course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with "mature readers". Completion of a formal synthesized research paper is required. Students are strongly encouraged to take the Advanced Placement examination in English Language and Composition.

## ENGLISH 12 – FIRST SEMESTER CORE

<b>Grade</b> .....	<b>12</b>
<b>Credits</b> .....	<b>2 ½</b>
<b>Prerequisite</b> .....	<b>English 11 Core</b>

English 12 will focus upon transitioning students into the next phase of their lives by reinforcing work in the five core content areas of reading, writing, speaking, listening, and viewing. Literature will focus upon the genres of tragedy and comedy and include classic as well as modern examples. Required writings will include expository essays, the personal essay, and the senior 20 project.

## AP ENGLISH LITERATURE AND COMPOSITION

<b>Grade</b> .....	<b>12</b>
<b>Credits</b> .....	<b>5</b>
<b>Prerequisites</b> .....	<b>English 11 and application process</b>

Advanced Placement English Literature and Composition content includes European and American literature and poetry and prose written after the sixteenth century. Authors read in the course may include such writers as Jane Austen, Charlotte Bronte, F. Scott Fitzgerald, Ernest Hemingway, William Shakespeare, Toni Morrison, etc. Themes, tones, and authors' techniques in the literature are explored through class discussions and

expository essays. Students are strongly encouraged to take the Advanced Placement exam in English Literature and Composition.

## ENGLISH SELECTIVE COURSES

Fulfills second semester English requirement for juniors and seniors

### BANNED BOOKS

**Grade**.....11, 12  
**Credits**.....2 ½  
**Prerequisite**.....English 11 Core

In this class, students will learn about the history of book banning and censorship. They will read some of the most frequently banned books in America. They will strive to understand why the books are subject to censorship. Then they will consider why certain audiences consider the books as valuable and laudable while others view them as offensive or threatening. Through research, students will explore censorship issues in the United States and around the world.

### FROM PAGE TO SCREEN

**Grade**.....11, 12  
**Credits**.....2 ½  
**Prerequisite**.....English 11 Core

How many times have you heard someone say “The book was better than the movie” or “The movie was nothing like the book”? This class will give students the opportunity to examine the reasons behind such comments by studying literature and the subsequent movies that are produced. The first portion of the course will focus upon “classic literature” such as Frankenstein, Shakespeare, and /or Greek mythology and the second half will look at popular fiction of the modern age. Through writing and research students will compare and contrast literature and its subsequent films, and when possible they will examine reasons for changes made for the production of films.

### MONSTERS IN LITERATURE

**Grade**.....11, 12  
**Credits**.....2 ½  
**Prerequisite**.....English 11 Core

Throughout time, humans have been fascinated with monsters. This course will explore the concept of monsters and what they reveal about humanity. Students will examine literature, popular culture, and film to view monsters as manifestations of cultural values, fears, and sometimes, ourselves. Critical reading in various genres will allow students to understand how monsters are used to convey pivotal themes and to analyze the ways in which authors employ literary elements to tell their stories.

### PROSE AND POETRY

**Grade**.....11, 12  
**Credits**.....2 ½  
**Prerequisite**.....English 11 Core

In this class, students will read poetry and short works of fiction from different countries, time periods and social groups. Students will examine mechanisms of writing and social influences on the works and writers. When possible, students will view films that represent authors reading and speaking about their work and processes. Students will develop creative works by emulating the mechanisms and styles of these works. Additionally, they will creatively respond to comparable social influences on their lives. Students will be expected to participate in a writer’s workshop environment where they analyze the mechanisms and authorship of the work. Additionally, students will write metacognitively on their own process as writers.

## READERS' CHOICE

**Grade**.....11, 12

**Credits**.....2 ½

**Prerequisite**.....English 11 Core

This course is a college preparatory course which meets all Language Arts National Core Curriculum Standards in reading, writing, speaking, listening, and language. It fulfills English requirements for 11th and/or 12th graders as a second semester selection following either English 11 or 12 core. Course content will vary from class to class and year to year as students under the guidance of the teacher will select the literature to be read using established criteria and approved book lists. Over the course of the semester, students will read representative texts addressing specific literary focus. Additional time to explore individualized reading will be provided to encourage students to improve their analytical skills both for books that they are inclined to read and books which allow them to venture into new genres and topics which extend their knowledge into unfamiliar zones.

## SHAKESPEARE AND POPULAR IMAGINATION

**Grade**.....11, 12

**Credits**.....2 ½

**Prerequisite**.....English 11 Core

In this class, students will read Shakespearean plays of a variety of genres and examine the popular appeal of Shakespeare's work in his time. Students will then read and review a selection of works directly influenced by Shakespeare's methods, styles, themes, and characters. Students will focus on the elements, ideals, and conventions of drama as well as the Elizabethan stage inspired by Shakespeare's time. Students will write analytically on the popular appeal of Shakespeare's work in his time and in ours.

## SPEAKERS, SPEECHES AND SPEAKING

**Grade**.....11, 12

**Credits**.....2 ½

**Prerequisite**.....English 11 Core

This course will focus on the art of rhetoric and how effective communication often combines the art of speaking with the art of writing. Students will read and study exemplary models of effective speeches, such as informative, persuasive, instructional, and entertaining/interpretive. After studying a specific style of speech, students will compose and present original speeches. Class members will develop and demonstrate effective listening skills.

## ENGLISH ELECTIVE OFFERINGS

**These courses do not meet the English requirement for graduation**

## CREATIVE WRITING

**Grade**.....10, 11, 12

**Credits**.....2 ½

**Prerequisite**.....None

Creative writing is an invaluable form of expression that encourages developmental thought. The writing process is one that asks the larger questions while allowing for the exploration of responses. This course will enable students to follow individual passions and contemplation through written language. Exposure to poetry, fiction, non-fiction, vignette, and lyrical writing will allow students to understand various forms of creative writing, and encourage them to self-identify genres that appeal to their style. Critical reading will be used to demonstrate effective writing techniques as a form of modeling, while the core of the class will be the opportunity for students to explore creative expression with a reflective (metacognitive) component.

**JOURNALISM AND PUBLICATIONS**

**Grade.....10, 11, 12**  
**Credits.....2 ½ or 5**  
**Prerequisite.....None**

This course has been created to allow students the opportunity to work on the school newspaper and yearbook during the school day. School Publications is a half year or full year elective which is designed to strengthen the knowledge and skills required for creating and publishing school publications. Students in the class will develop skills in graphic design, layout, writing, marketing, journalism, leadership and collaboration.

**FRESHMAN HONORS SEMINAR**

**Grade.....9**  
**Credits.....5**  
**Prerequisite.....None**

The Freshman Honors Seminar is a humanities based elective that exposes students to an honors level curriculum that will strengthen their knowledge and skills related to the English 9 and World Cultures interdisciplinary program. Instruction, assignments, and projects in the seminar will supplement materials and concepts studied in the Social Studies and English classes. As a full-year honors level course, marking period and final grades will be weighted accordingly. This course is recommended for students who are interested in taking AP History and/or English 10 Honors in their sophomore year or either of the AP English courses in Grades 11 or 12. **This is a 5 credit course that meets regularly during normal school hours. A student's grade in this course will no longer impact English or Social Studies course grades.**

# **FAMILY AND CONSUMER SCIENCE**

**Meets the Practical Arts Requirement**

<b>FAMILY AND CONSUMER SCIENCE</b>	<b>Grade(s) Offered</b>	<b>Credits</b>
Basic Foods	9, 10, 11, 12	2.5
International Foods	9, 10, 11, 12	2.5
Interior Decoration	9, 10, 11, 12	2.5
Clothing I	9, 10, 11, 12	2.5
Clothing II	10, 11, 12	5
Clothing III	11, 12	5
Clothing IV	12	5

## **BASIC FOODS**

**Grade**.....9, 10, 11, 12

**Credits**.....2 ½

**Prerequisite**.....None

This course provides students with guidance in managing food choices. The course focuses on instruction in safety, preparation and cooking techniques. It will provide guidelines for preparing nutritious, well-balanced meals that adhere to the USDA My Plate guidelines.

## **INTERNATIONAL FOODS**

**Grade**.....9, 10, 11, 12

**Credits**.....2 ½

**Prerequisite**.....Basic Foods

Students will explore different foods and cultures from around the world. Each country will be studied according to its history, agriculture, geography, climate and economy. Students will plan, prepare, cook and taste a variety of foods from various countries.

## **INTERIOR DECORATION**

**Grade**.....9, 10, 11, 12

**Credits**.....2 ½

**Prerequisite**.....None

This course is an introduction to the many-faceted areas of housing. Areas to be considered are the theory and techniques involved in planning and designing the interior and exterior of homes, evaluation of floor plans, choice of color, furniture and accessories, as well as some creative individual projects.

## **CLOTHING I**

**Grade** .....9, 10, 11, 12

**Credits**.....2 ½

**Prerequisite** .....None

Clothing I is an introductory course of study which reviews the basic essentials of sewing techniques using the sewing machine, as well as the use of sewing knowledge in problems involving new materials and techniques. Included are special techniques in fitting and development. Throughout the course, individuality is stressed. Students are responsible for purchasing materials.

**CLOTHING II**

**Grade**.....10, 11, 12

**Credits** ..... 5

**Prerequisite**.....Clothing I

Clothing II expands on the skills students learned in Clothing I. Students select and sew garments and projects of their choice. Students are responsible for purchasing materials.

**CLOTHING III**

**Grade** .....11, 12

**Credits**..... 5

**Prerequisites**.....Clothing I and II

This course is based on knowledge, experience and skills acquired in Clothing I and II. Emphasis is placed on design, as well as improving techniques in individual project construction. Students are responsible for purchasing materials.

**CLOTHING IV**

**Grade**.....12

**Credits**..... 5

**Prerequisites**.....Clothing I, II, and III

This course is the culmination of all the clothing courses. It is a continuation of Clothing III for those students who wish to refine their skills and proficiencies. Students are responsible for purchasing materials.

# FINE ARTS

Meets the Fine and Performing Arts Requirement

FINE ARTS	Grade(s) Offered	Credits
Introduction to Draw-Paint-Design	9, 10, 11, 12	2.5
Draw-Paint-Design I	9, 10, 11, 12	5
Draw-Paint-Design II	10, 11, 12	5
Draw-Paint-Design III	11, 12	5
Draw-Paint-Design IV	12	5
AP Studio Art	12	5
Computer Graphic Design I	9, 10, 11, 12	5
Computer Graphic Design II	10, 11, 12	5
Introduction to Ceramics	9, 10, 11, 12	2.5
Ceramics I	9, 10, 11, 12	5
Ceramics II	10, 11, 12	5
Ceramics III	11, 12	5
Ceramics IV	11, 12	5
Digital Photography I	9, 10, 11, 12	5
Digital Photography II	10, 11, 12	5
Art History	11, 12	2.5

## **INTRODUCTION TO DRAW-PAINT- DESIGN**

**Grade.....9, 10, 11, 12**

**Credits.....2 ½**

**Prerequisite.....None**

This half-year course focuses on the individual needs of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year students with a condensed curriculum based on the full-year courses of study. The half-year course assignments differ from those of the full-year courses to avoid repetition. The full year course is recommended for students planning to have a sequence in art. Lab fees may apply.

## **DRAW-PAINT- DESIGN I**

**Grade.....9, 10, 11, 12**

**Credits.....5**

**Prerequisite.....None**

This course is an introduction to the process of drawing, painting, and design, with a focus on the visual elements/principles as a basis for creating works that are personally expressive. Projects are introduced within the context of art history and culture. A variety of media, techniques, and projects will provide opportunities to strengthen critical/creative thinking and problem-solving skills. The analysis and critiquing of artists' works,

as well as their own self-assessments, will be a source of inspiration and will expand the students’ visual dialogue, providing a deeper connection with the cultural environment in which they live. Introduction for the preparation of a personal portfolio will be included in this course. Studio fees may apply.

**DRAW-PAINT-DESIGN II**

**Grade.....10, 11, 12**  
**Credits.....5**  
**Prerequisite.....Draw-Paint-Design I**

This course is designed for students with a serious interest in art. It explores in greater depth the areas of painting, drawing, and design covered in the introductory course. Projects in both fine art and commercial art will be assigned with an emphasis on more sophisticated solutions to the problems of composition, color, idea communication, and overall presentation. Depending on the student’s level of ability, this course will allow for more student-generated assignments. Idea stimulation will come from slide presentations, visits from working artists, and/or museums or gallery trips. Portfolio preparation is emphasized for all students in this course. Lab fees may apply.

**DRAW-PAINT-DESIGN III**

**Grade.....11, 12**  
**Credits.....5**  
**Prerequisite.....Draw-Paint-Design II**

Mastering media and techniques will be the emphasis of this course. Projects will be designed to encourage students to use critical thinking skills to develop a concept into a work of art by projecting an outcome, setting their own criteria to reach this outcome, making judgments during the process and critiquing their work with the idea of achieving a cohesive, interesting and aesthetic rendering. A sketchbook is required for planning and observational drawing practice. Lab fees may apply.

**DRAW-PAINT-DESIGN IV/AP STUDIO ART**

**Grade.....12**  
**Credits.....5**  
**Prerequisite.....Draw-Paint-Design III**

Students will be required to have had at least two years of art or to submit a portfolio of work for review before admittance to this advanced course. In this AP level studio course, students will work to produce a portfolio of 20-30 works, assembled in part with major works previously completed in the prerequisite Draw-Paint-Design III. Students will be expected to complete project work during the summer and do extensive work outside of school (at least 10 projects are done solely at home). It will be mandatory for students to maintain a sketchbook during the school year. Students will plan, organize, and install an end-of-the-year exhibition wall of their work at the annual Art and Technology Show. Students are strongly encouraged to submit their completed works in May to be evaluated and scored by the College Board. There is an AP registration fee associated with submitting artwork. Lab fees may apply.

**COMPUTER GRAPHIC DESIGN I**

**Grade.....9, 10, 11, 12**  
**Credits.....5**  
**Prerequisite.....None**

This course is structured to provide students with a basic knowledge of the tools used in the computer graphic arts field. Each student will have the opportunity to create projects ranging from simple flyers to complex magazine ads and unique web pages. Assignments will include scanning photographs and artwork, retouching images, re-sizing and combining text and graphics. Using industry standard software-Adobe Photoshop and Adobe Illustrator-will provide students with a strong foundation in the technical aspects of computer-generated art. This course will begin to prepare students for future entry into the high-tech computer graphic design field.

## **COMPUTER GRAPHIC DESIGN II**

**Grade**.....10, 11, 12

**Credits**.....5

**Prerequisite**.....**Computer Graphic Design I**

This course will develop students' technical skills needed to advance in the visual arts. Through the use of industry standard computer-imaging programs such as Photoshop, Illustrator, and Quark, students will build upon the skills learned in the Computer Graphic Design I. Topics will include digital imaging, typography, and layout design. Students will also create and develop both their evaluative portfolio and presentation portfolio in computer design.

## **INTRODUCTION TO CERAMICS**

**Grade**.....9, 10, 11, 12

**Credits**..... 2 ½

**Prerequisite**.....**None**

This course is designed for students who have never had ceramics at the high school level. Students are taught how to build pottery by use of pinch, coil and slab methods of construction. Special emphasis is placed on surface treatments such as relief, incised design, slip trailing, inlay, sgraffito, underglazing, and other decorative techniques. Students also learn glaze application. Students are encouraged to create finished products that are aesthetically pleasing, functional and individually expressive. Lab fees may apply.

## **CERAMICS I**

**Grade**.....9, 10, 11, 12

**Credits**.....5

**Prerequisite**.....**None**

This course is designed for beginners, as well as advanced students. The students will be taught methods of hand building such as coil, pinch, slab, glaze application, and firing processes are explained. Elements of good design are emphasized through the construction of clay objects in order to develop a sense of aesthetics and individual expression within the student. Students are given specific problem solving assignments which stress elements and principles of design, the use of the potter's wheel, glaze compositions and advanced techniques such as spouts, handles, and lids. Lab fees may apply.

## **CERAMICS II**

**Grade** .....10, 11, 12

**Credits**.....5

**Prerequisite**.....**Ceramics I**

This course is designed for students who are interested in exploring Ceramics on a more personal level. Each student will be assigned a unit of study throughout the course of the year. These units of study will ask the students to use a specific method of construction or to concentrate on a specific theme. Within this unit, the students will be responsible for brainstorming, designing, planning, and executing their work on a proficient level. The students will be graded in similar fashion to other Ceramics levels; however, their past experiences will be taken into account when considering craftsmanship, thinking and planning, experimentation and creativity. Students taking this level of Ceramics will be expected to act as good role models for other students taking the class; exemplifying great participation, execution of work, and behavior in the classroom. Work created during this level of Ceramics will be of portfolio-level quality. Lab fees may apply.

## **CERAMICS III, IV**

**Grade**.....11, 12

**Credits**.....5

**Prerequisite**.....**Ceramics II**

These advanced courses are designed for students who would like to explore Ceramics more in-depth to develop their own style. Students will be asked to propose project ideas to be approved by the teacher that expand upon previous knowledge of the subject matter. These proposed projects should also be designed to

challenge the students in new ways, such as by implementing new surface techniques or methods of construction. Students will be responsible for brainstorming, designing, planning, and executing their work on a skillful level. The students will be graded in similar fashion to other Ceramics levels; however their past experiences will be taken into account when considering craftsmanship, thinking and planning, experimentation and creativity. Work created during this level of Ceramics will be of portfolio-level quality. Lab fees may apply.

**DIGITAL PHOTOGRAPHY I**

**Grade**.....9, 10, 11, 12  
**Credit**.....5  
**Prerequisite**.....None

This course will provide students with a variety of technical and creative skills. It will help the students become well rounded in the fundamentals of digital photography. Four areas of instruction will be emphasized: how cameras work, how composition works, how lighting works, and how to use photo editing software. Students will learn manual camera functions including control of aperture, shutter speed, and lens choice. Continued Photoshop lessons will be assigned and digital asset management using Adobe Bridge will also be taught. As the course progresses, students will become more adept at lighting, how to use photo editing software, and setting up and taking their own photos. Students will receive basic instruction, demonstration, and see samples of the desired outcomes at the beginning of each project. They will be allowed to go outside and shoot assignments, based on what they are learning. Perhaps the most useful part of classroom instruction will be daily reviews of photos students have shot the previous day(s). They will develop their own style through learning from peer and professional examples.

**DIGITAL PHOTOGRAPHY II**

**Grade**.....10, 11, 12  
**Credit**.....5  
**Prerequisite**.....Digital Photography I

Digital Photography II will afford students further opportunity to refine and extend the skills they learned in Digital Photography I. Students will continue the art of photographic imaging, with an introduction to more advanced projects. It will extend the students’ knowledge of technique and guide them in developing personal outlooks toward specific applications of the photographic process. As students advance, they’ll need to identify what tools and technical and aesthetic challenges they will be working with to accomplish their goals. They will apply camera techniques and design theories to develop their own individual body of work.

**ART HISTORY**

**Grade**.....11, 12  
**Credits**.....2 ½  
**Prerequisite**.....None

This course surveys art history from ancient to contemporary times. The purpose of this course is to introduce students to the process of analyzing art and architecture throughout history. Through readings, slides, PowerPoints, videos, museum visits and virtual tours, students will view works of art and architecture, understand art periods/movements/styles and make connections between the unfolding of history and development of art. Additionally, the course will examine the development of the artist’s craft from stylistic changes to new mediums.

# INDUSTRIAL ARTS AND TECHNOLOGY

**Meets the Practical Arts Requirement**

<b>INDUSTRIAL ARTS AND TECHNOLOGY (STEM - Science, Technology, Engineering, Mathematics)</b>	<b>Grade(s) Offered</b>	<b>Credits</b>
Architectural Design	9, 10, 11, 12	2.5
Introduction to Technology	9, 10, 11, 12	2.5/5
Fundamentals of Engineering	10, 11, 12	5
Computer Aided Design	9, 10, 11, 12	5
Computer Science	9, 10, 11, 12	5
AP Computer Science A	10, 11, 12	5
AP Computer Science Principles	10, 11, 12	5
Mobile App Development	10, 11, 12	2.5
Web Development	10, 11, 12	2.5
Robotics & Control	10, 11, 12	5
Introduction to Woodworking	9, 10, 11, 12	2.5
Woodworking I	9, 10, 11, 12	5
Cabinet Making & Furniture Design	10, 11, 12	5
Woodworking in the 21st Century	10, 11, 12	5

## **ARCHITECTURAL DESIGN**

**Grade.....9, 10, 11, 12**

**Credits.....2 ½**

**Prerequisite.....None**

In this course students will learn the various ways to discover how architecture impacts our world. Students will learn all phases of a project from conceptual design through construction. Students will utilize the programs in the Autodesk Suite including AutoCAD and Revit, as well as Adobe Photoshop for project presentations. Students will take a virtual journey through several important historic buildings and architects. They will learn how to design and solve problems within the means of a structure. Students will build scale models to represent their design ideas. They will evaluate each other through design critiques. Students will express their ideas and solutions during final design presentations.

## **INTRODUCTION TO TECHNOLOGY**

**Grade.....9, 10, 11, 12**

**Credits.....2 ½ or 5**

**Prerequisite.....None**

This course is designed for all students who use technology or aspire to pursue technology based careers. This is a Project Based Learning course in which students gain knowledge and skills by working for an extended

period of time to investigate and respond to a complex question, problem or challenge. Students in essence approach the problem as an engineer or inventor. Throughout the course students will develop critical thinking skills with the aid of the Technological Problem-Solving Model. Furthermore, students will document and communicate their design processes through project portfolios. This course will also evoke students to consider the historical and social impacts of technology on our man-made world.

**FUNDAMENTALS OF ENGINEERING**

**Grade.....10, 11, 12**  
**Credits.....5**  
**Prerequisite.....CAD or Introduction to Technology**

This course allows students to explore the vast opportunities in technology-based careers, specifically civil, electronic, industrial, and mechanical engineering. Students will experience integrated education through lectures, laboratory activities, guest speakers, field trips, and multimedia research. This course is intended to demonstrate to students the direct application of science, math, and technology in “real world” situations.

**COMPUTER AIDED DESIGN (CAD)**

**Grade.....9, 10, 11, 12**  
**Credits.....5**  
**Prerequisite.....None**

This course will offer the students the opportunity to develop computer skills for 3-dimensional printing and CNC milling as well as technical communication skills. Students will learn mechanical and architectural design through the use of Autodesk and Vectric Aspire software. Computer Aided Design is used in a vast array of design, engineering, manufacturing and medical careers. This course will address the principle methods of design along with essential skills for manipulating the design software. Upon the completion of this class students will be able to produce computer models, technical drawings and 3-dimensional prototypes. This class will be helpful to all students pursuing technical careers and advanced woodworking classes.

**COMPUTER SCIENCE**

**Grade.....9, 10, 11, 12**  
**Credits.....5**  
**Prerequisite.....Algebra I**

Computer Science is designed to teach the fundamental concepts of top-down computer programming beginning with Visual Basic language and advancing to C++ language. During the first half of the course students will apply different features and capabilities of the Visual Basic language to applications provided in the areas of mathematics, probability and statistics, business, industry and education. Students will eventually progress from Visual Basic to the C++ language. In the C++ language students will create console applications and code in the same style as Java and many other popular languages.

**AP COMPUTER SCIENCE A**

**Grade.....10, 11, 12**  
**Credits.....5**  
**Prerequisite.....Computer Science (full year)**

This course is designed to use Java programming language to further concepts learned in Computer Science. AP Computer Science A emphasizes object oriented programming OOP methodology with a concentration on problem solving and algorithm development. It also includes the study of data structures, design and abstraction. Design issues that make programs understandable, adaptable and reusable is emphasized. The course is designed to be the equivalent of a first semester college-level course in Computer Science.

## AP COMPUTER SCIENCE PRINCIPLES

**Grade**.....10, 11, 12

**Credits**.....5

**Prerequisite**.....**Algebra I**

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computational thinking. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cyber security concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technology for self-expression and to address real-world problems by building relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

## MOBILE APP DEVELOPMENT

**Grade**.....10, 11, 12

**Credits**.....2 ½

**Prerequisite**.....**Computer Science (full year) or AP Computer Science Principles**

This course is designed to introduce students to the development of mobile applications. Mobile App Development is one of the fastest growing areas of Computer Science in both industry and at the university level. Students will use their prior programming knowledge to create applications that can run on both smartphones and tablet computers. They will also learn to design applications that use images, sounds, animations and phone functions.

## WEB DEVELOPMENT

**Grade**.....10, 11, 12

**Credits**.....2 ½

**Prerequisite**.....**Computer Science (full year) or AP Computer Science Principles**

This course is designed to introduce students to website development. The course introduces a variety of language and tools, focusing on what a student needs to know to start creating web pages. Hypertext Markup Language (HTML) and Extensible HTML (XHTML) will be covered. Students will also use Cascading Style Sheets (CSS) and JavaScript to make dynamic web pages (DHTML). They will create images, image maps and animations for their sites, and create a complete site of their own design.

## ROBOTICS AND CONTROL

**Grade**.....10, 11, 12

**Credits**.....5

**Prerequisite**.....**CAD or Introduction to Technology or Computer Science**

This course is designed for students to experience design and development of robots and control devices for technology-based systems. This course will teach students to design, construct and program machines that will be controlled by microcomputers, and electromechanical systems. Lab fees may apply.

## INTRODUCTION TO WOODWORKING

**Grade**.....9, 10, 11, 12

**Credits**.....2 ½

**Prerequisite**.....**None**

This course is for anyone interested in working with wood. The class is similar to the full-year class but designed for those students with scheduling limitations or beginners just wanting to explore a new area. Lab fees may apply.

## WOODWORKING I

**Grade**.....9, 10, 11, 12

**Credits**.....5

**Prerequisite**.....**None**

This course is designed for those desiring a fundamental background in basic woodworking techniques. The

major emphasis is on the safe use of tools and machines common to any woodshop. Because students select their own projects to work on, different abilities and limitations as to experience can be accounted for. The student then can work at his or her own rate to complete as many projects as possible. Lab fees may apply.

### **CABINET MAKING AND FURNITURE DESIGN**

**Grade.....10, 11, 12**

**Credits.....5**

**Prerequisite.....Introduction to Woodworking or Woodworking I**

Cabinet Making and Furniture Design is offered to students who wish to enhance their understanding of cabinetmaking and furniture design, from concept to finish. It includes training in safety, design, project planning, materials and cost analysis. Students will acquire practical experience in the use of basic hand tools, power tools, and advanced computer controlled machinery. Additionally students will be required to investigate and use advanced techniques in material processing for furniture construction. This course is intended for students who would like to increase their “Do-It-Yourself” skills, or trade preparation.

### **WOODWORKING IN THE 21<sup>ST</sup> CENTURY**

**Grade.....10, 11, 12**

**Credits.....5**

**Prerequisites.....Introduction to Woodworking or Woodworking I**

Woodworking in the 21<sup>st</sup> Century is offered to students who wish to enhance their understanding of design and manufacturing within the digital age. It includes safety training, product design, project planning, material selection and finishing. The students will acquire practical experience in melding traditional techniques with modern materials tools and machinery. Students will enter the digital realm with the use of multiple 3-dimensional software programs for communicating with computer numerical control (CNC) machines. This course is intended for students who would like to continue their woodworking experience with the help of digital tools. This course offers valuable career preparation skills.

# MATHEMATICS

**Math course sequence is found on page 61**

<b>MATHEMATICS</b>	<b>Grade(s) Offered</b>	<b>Credits</b>
Algebra I	9	5
Algebra I Concepts	9	5
Geometry	9, 10	5
Geometry Concepts	10	5
Geometry Honors	9, 10	5
Algebra II	10, 11	5
Algebra II Concepts	11	5
Algebra II Honors	10, 11	5
Precalculus	11, 12	5
Precalculus Honors	11, 12	5
Calculus	12	5
AP Calculus AB	12	5
Mathematical Analysis	12	5
Statistics	12	5
AP Statistics	11, 12	5

## **ALGEBRA I**

**Grade.....9**

**Credits.....5**

**Prerequisite.....None**

This course exposes students to an introduction to the structure of the real number system and the language and symbols of algebra. Students who successfully complete this course are expected to develop mastery and proficiency in the following areas: operations of real numbers, open sentences in one variable, open sentences in two variables, solution of a variety of verbal problems, graphing and variety of linear functions, solution of a system of equations and inequalities, factoring of polynomial expressions, simplification of algebraic expressions, simplification of expressions containing radicals and/or exponents, matrices and determinants, and probability. This course helps to meet the requirements for passing the NJSLA.

## **ALGEBRA I CONCEPTS**

**Grade.....9**

**Credits.....5**

**Prerequisite.....None**

The course content is similar to Algebra I. This course will focus on the development of problem solving. It is expected that a student who successfully completes this course will have developed mastery and proficiency

in the following areas: operations of real numbers, open sentences in one variable, open sentences in two variables, solution of a variety of verbal problems, graphing a variety of linear functions, solution of a system of equations and inequalities, factoring of polynomial expressions, simplification of algebraic expressions, simplification of expressions containing radicals and/or exponents, matrices and determinants, and probability. This course helps to meet the requirements for passing the NJSLA.

### **GEOMETRY**

**Grade**.....9, 10  
**Credits**.....5  
**Prerequisite**.....Algebra I

This course is designed to give students an understanding of the nature of a mathematical system and an appreciation of the basic structure of geometry. Emphasis is placed on the role of the inductive and deductive reasoning in mathematical situations. It is expected that a student who successfully completes this course will have developed mastery and proficiency in the following areas: postulates and theorems of geometry, deductive reasoning of a proof, angle relationships and parallelism, proof of congruency in triangles, proof of similarity in polygons, computation of areas of polygons and circles, solution of numerical exercises relevant to circles, arcs, angles and segments, basic constructions, knowledge of coordinate geometry by determining equations of lines, simple probability, right triangle trigonometry, and volumes of solids. The Geometry course helps to meet the requirements for passing the NJSLA.

### **GEOMETRY CONCEPTS**

**Grade**.....10  
**Credits**.....5  
**Prerequisite**.....Algebra I

Emphasis is placed on the discovery and applications of geometric theorems with a continuous review of algebraic concepts using the geometric theorems being studied. It is expected that a student who successfully completes this course will have developed mastery and proficiency in the following areas: postulates and theorems of geometry, deductive reasoning of a proof, basic constructions, angle relationships and parallelism, proofs of congruent triangles, proofs of similar triangles, solution of numerical exercises relevant to circles, arcs, angles and segments, computation of areas of polygons and circles, knowledge of coordinate geometry by determining equations of lines, right triangle trigonometry, volumes of solids, and simple probability. The Geometry Concepts course helps to meet the requirements for passing the NJSLA.

### **GEOMETRY HONORS**

**Grade**.....9, 10  
**Credits**.....5  
**Prerequisites**.....Algebra I and application process

This is a course in plane and solid geometry designed for students who will take Precalculus and Calculus. Emphasis is placed on proof and discovery. The student is encouraged to investigate and/or develop new proofs. It is expected that a student who successfully completes this course will have developed mastery and proficiencies in the following areas: postulates and theorems of geometry, proof by deductive reasoning, knowledge of angle relationships and parallelism, proof of congruency in triangles and similarity in polygons, computation of areas and volumes, solution of numerical exercises and proofs, basic constructions, knowledge of coordinates, solution of involved proofs, solution of problems in analytic geometry, simple probability, and right triangle trigonometry. The course helps to meet the requirements for passing the NJSLA.

### **ALGEBRA II**

**Grade**.....10, 11  
**Credits**.....5  
**Prerequisites**.....Algebra I and Geometry

This course reviews topics from first year algebra and treats advanced algebraic concepts. It is expected that a student who successfully completes this course will have developed mastery and proficiency in the following

areas: polynomials and rational expressions, solutions of linear equations and inequalities, knowledge of coordinate geometry, solution of relation and function problems, solution of quadratic and logarithmic function problems, knowledge of conic sections, solution of systems of sentences, operations on expressions involving real exponents, knowledge of sequence and series, matrices and determinants, and simple probability. This course helps to meet requirements for passing the NJSLA.

**ALGEBRA II CONCEPTS**

**Grade**.....11  
**Credits**.....5  
**Prerequisites**.....**Algebra I and Geometry**

Algebra I concepts are reviewed and more advanced algebraic concepts are developed. Basic concepts in coordinate geometry are expanded to the concept of functions. It is expected that a student who successfully completes this course will have developed mastery and proficiency in the following areas: polynomial and rational expressions, solutions of linear equations and inequalities, knowledge of coordinate geometry, solution of relation and function problems, solution of exponential and logarithmic function problems, knowledge of conic sections, solution of systems of open sentences, operations on expressions involving real exponents, knowledge of sequences and series, matrices and determinants, and simple probability. This course helps to meet the requirements for passing the NJSLA.

**ALGEBRA II HONORS**

**Grade**.....10, 11  
**Credits**.....5  
**Prerequisites**.....**Algebra I, Geometry (advanced levels suggested) and application process**

This is a second course in algebra designed for students who have completed Algebra I and shown exceptional ability. A student who successfully completes this course is expected to have developed a mastery and proficiency in the following areas: knowledge of sequences and series and mathematical induction, solution of linear function and relation problems, solution of systems of linear open sentences, simplification of polynomial and rational expressions, simplification of radicals, solution of quadratic equations, operations of polynomial functions, simplification of complex numbers, knowledge of exponential and logarithmic functions, matrices and determinants, trigonometry (circular functions), trigonometric identities and equations, counting and probability, statistics and data analysis. The course helps to meet the requirements for passing the NJSLA.

**PRECALCULUS**

**Grade**.....11, 12  
**Credits**.....5  
**Prerequisites**.....**Algebra I and II and Geometry**

Precalculus is typically the fourth course in the sequence with Algebra I, Geometry, and Algebra II. It is a prerequisite for studying Calculus either at the high school or college level. Major topics include sequences and series, functions and graphs, trigonometry, exponential and logarithmic functions, systems of equations, and analytic geometry. A graphing calculator is used to assist in understanding and problem solving.

**PRECALCULUS HONORS**

**Grade**.....11, 12  
**Credits**.....5  
**Prerequisites**.....**Algebra I & II, Geometry, (advanced levels suggested) and application process**

Precalculus Honors, designed for the advanced student, is typically the fourth course in the accelerated sequence with the advanced levels of Algebra 1, Geometry, and Algebra II. It is strongly suggested as a prerequisite for those students who plan to select Calculus or Advanced Placement Calculus. Major topics include sequences and series, functions and graphs, trigonometry, exponential and logarithmic functions, systems of equations, matrix algebra, mathematical modeling, and analytic geometry. A graphing calculator is used extensively to assist in understanding and problem solving.

## **CALCULUS**

**Grade.....12**

**Credits.....5**

**Prerequisite.....Precalculus or Precalculus Honors**

This course is designed for seniors who have completed the Algebra I-Geometry-Algebra II-Precalculus sequence. The purpose of the course is to prepare students to take Calculus as college freshmen. The course begins with a review of elementary functions and several precalculus topics. The course content will include: limits and continuity, derivatives and applications including related rates, definite integrals and mathematical modeling, solids of revolution and L'Hopital's Rule. Algebraic development of concepts will be presented, and the use of graphing calculators and computers in problem solving will be used throughout the course.

## **ADVANCED PLACEMENT CALCULUS AB**

**Grade.....12**

**Credits.....5**

**Prerequisites.....Precalculus or Precalculus Honors and application process (honors suggested)**

An Advanced Placement course in mathematics consisting of a full academic year of work in calculus and related topics comparable to courses in colleges and universities. It is expected that students who take the AP course in calculus will seek college credit and/or advanced placement from institutions of higher learning. Students are strongly encouraged to take the Advanced Placement Calculus AB examination in May.

## **MATHEMATICAL ANALYSIS**

**Grade.....12**

**Credits.....5**

**Prerequisite.....Algebra II**

This course focuses on such topics in algebra, trigonometry, probability, and statistics as polynomial, exponential, and logarithmic functions, the law of sines and cosines, experimental and theoretical probability and applications, sampling techniques, and the applications of dispersion and correlation. The course is designed to complete the high school sequence of math.

## **STATISTICS**

**Grade.....12**

**Credits.....5**

**Prerequisite.....Algebra II**

Statistics is designed 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: 1) exploring data, 2) planning a study, 3) anticipating patterns in advance, and 4) statistical inference.

## **ADVANCED PLACEMENT STATISTICS**

**Grade.....11, 12**

**Credits.....5**

**Prerequisite.....Precalculus, prior or concurrent**

The purpose of the Advanced Placement Statistics course 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: 1) exploring data, 2) planning a study, 3) anticipating patterns in advance, and 4) statistical inference. Students are strongly encouraged to take the Advanced Placement examination in Statistics in May. This course may be taken concurrently with the Precalculus, Precalculus Honors, Calculus or Advanced Placement Calculus. Only students with previous math grades of 80 or higher are eligible to be considered for AP Statistics.

# MUSIC AND THEATER

**Meets the Fine and Performing Arts requirement**

**NOTE: Students may sing in Chorus and play in Band and/or Orchestra on one registration.**

<b>MUSIC AND THEATER</b>	<b>Grade(s) Offered</b>	<b>Credits</b>
Musical Performance: Band	9, 10, 11, 12	5
Musical Performance: Chorus	9, 10, 11, 12	5
Musical Performance: Orchestra	9, 10, 11, 12	5
Introduction to Guitar, Keyboard, & Music Theory	10, 11, 12	5
Introduction to Theater	9, 10, 11, 12	2.5
Theater I	9, 10, 11, 12	2.5

## **MUSICAL PERFORMANCE: BAND**

**Grade.....9, 10, 11, 12**

**Credits.....5**

**Prerequisite.....Ability to play a band instrument**

**Beginners need the instructor’s permission to register.**

Band is an exciting and serious performance course designed to continue a student’s study of a musical instrument. Literature studied consists of standard band literature, and orchestral transcriptions. Each student’s experience in band is composed of participation in the concert band. \*Band students are required to participate in all public performances, as these events serve as the culminating activities of the class learning experience. The performance outlets consist of evening concerts, school concerts, tours, recitals, pep rallies, the Memorial Day parade, commemorative events such as the Senior Awards Program and graduation. Each student receives a rehearsal and performance calendar prior to each semester and commits him/herself to that calendar upon entering the course.

## **MUSICAL PERFORMANCE: CHORUS**

**Grade.....9, 10, 11, 12**

**Credits.....5**

**Prerequisite.....None**

The Women’s Chorus and Concert Chorus are open to all students interested in studying and performing representative choral literature from the Renaissance through the Modern Period. The Women’s Chorus is open to 9th and 10th grade girls. The Concert Chorus is open to all boys (grades 9-12) and 11th and 12th grade girls. Development of the singing voice and ensemble singing techniques are the core of the learning experience. Chorus students are required to participate in all public performances as these events serve as the culminating activities of the learning process.

## **MUSICAL PERFORMANCE: ORCHESTRA**

**Grade.....9, 10, 11, 12**

**Credits.....5**

**Prerequisite.....Ability to play an orchestral stringed instrument - Registration in Band for winds**

This course includes all string players in the orchestra and woodwind, brass, and percussionists enrolled in Band who may request participation in this ensemble. The instructors decide participation in order to maintain a balanced instrumentation in proportion to the string section. The orchestra studies and performs orchestral

literature from the Baroque to the Modern periods. Occasionally, the class performs to accompany the Chorus. Field trips may include exchanges, orchestra festivals, and concerts. Students enrolled in the class agree to participate in all rehearsals, concerts, trips, and functions of the orchestra upon enrolling in the course.

**INTRODUCTION TO GUITAR, KEYBOARD & MUSIC THEORY**

**Grade.....10, 11, 12**

**Credits.....5**

**Prerequisite.....None**

Music theory is the foundation of all western music from modern popular music to traditional classical music. Students will apply their knowledge through performing all genres of music with guitar, keyboard, and other instruments as well as composing their own music.

**INTRODUCTION TO THEATRE**

**Grade.....9, 10, 11, 12**

**Credits.....2 ½**

**Prerequisite.....None**

Introduction to Theatre is a half-year elective that serves as an introduction and overview to the fundamentals of play production and stage terminology. The course will expose students to the many theatrical roles of actor, audience, playwright, technician, designer, critic, director, and researcher. The course is primarily an acting course and fundamentals in acting will be covered including the following: movement, voice and speech, monologue study and scene study. Through guided improvisation activities and ensemble-building games, students will affirm their own identities and creative decision-making skills while also discovering how to use their bodies and voices as their primary tools for acting before progressing to scene study. The Instructional techniques used to teach the course will be modeling, using theatre resources for reading material handouts, collaborative learning, project-based learning activities, discussion, research based learning, and potentially class trips. Students are required to either be involved with the fall drama or attend a performance and write a critique.

**THEATRE I**

**Grade.....9, 10, 11, 12**

**Credits.....2½**

**Prerequisite.....None (Introduction to Theatre preferred)**

This course is an in-depth review and analysis of acting with a focus on scene study. It will provide students who have an interest in theatrical studies an opportunity to deepen their knowledge on many theatrical roles of actors, audiences, playwrights, technicians, designers, critics, directors, and researchers with emphasis on a student centered approach that allows for students to actively engage in performances and production skills. The intent of this class is to afford students the opportunity to enrich their passion for theater, while providing a deep understanding of theatrical content knowledge. Material from Introduction to Theatre will be reviewed before progressing to scene study. Scene study will include American classics such as Glass Menagerie, a Shakespeare unit, a stage combat unit with guest artist, audition workshop unit, and a wildcard scene. Participation in or attendance at the spring musical is required.

# PHYSICAL EDUCATION

The Physical Education units incorporate aspects of skill development, concepts/strategies, and overall fitness in accordance with the most up-to-date New Jersey Core Curriculum Content Standards. Each unit will be approximately three (3) weeks long.

**Team and Individual sports will follow the following sequence:**

- Introduction of unit
- Skill development
- Practice
- Introduction of rules & game play
- Competitive game play/tournaments

PHYSICAL EDUCATION	Grade(s) Offered	Credits
Physical Education 9/Health - Safety (marking period 2)	9	5
Physical Education 10/Driver’s Ed. (marking period 1)	10	5
Physical Education 11/Health - Safety (marking period 3)	11	5
Physical Education 12/Health - Safety (marking period 4)	12	5

**PHYSICAL EDUCATION 9 & HEALTH / SAFETY**

**Grade**.....9  
**Credits**.....5  
**Prerequisite**.....None

Physical Education is a required subject for all pupils. Health Education is a one marking period course offered at James Caldwell High School as part of the Grade 9 Health and Physical Education curriculum. Health Education replaces Physical Education during this time period and students remain with their assigned Health and Physical Education teacher. During the marking period of health, students are graded like other academic courses; however this marking period is incorporated into their overall Health and Physical Education cumulative grade for the year. This course has been designed to help students acquire the knowledge and skills necessary to effectively respond to emergency situations. After completing this course, students will be able to recognize and provide basic care for injuries and sudden illnesses, including an AED for victims of sudden cardiac arrest, until advanced medical personnel arrive and take over.

**PHYSICAL EDUCATION 10 & HEALTH / DRIVERS’ EDUCATION**

**Grade**.....10  
**Credits**.....5  
**Prerequisite**.....Physical Education 9

Physical Education is a required subject for all pupils. Sophomore Driver Education at James Caldwell High School is one marking period in length. This course is designed to help novice drivers attain knowledge, skills, and attitudes necessary to become a safe, low risk, responsible driver. This comprehensive course will provide in depth coverage of ways to control a vehicle, how to cope with driving in different environments, and what being a responsible driver entails. Students will learn driving responsibilities, basic car control, traffic signs, signals, roadway markings, natural laws and car control, performing basic maneuvers, negotiating intersections, and sharing the roadway. Furthermore, students will learn the essentials when driving in urban,

suburban and rural areas; expressway driving; handling emergencies; buying, owning, and maintaining a vehicle; and driving in adverse conditions. Finally, students will learn how emotions, alcohol, and drugs can affect the way an individual drives. The comprehensive in-depth course will end with the administration of the knowledge portion of the New Jersey Driver Test.

**PHYSICAL EDUCATION 11 & HEALTH / SAFETY**

**Grade**.....11  
**Credits**.....5  
**Prerequisite**.....Physical Education 10

Physical Education is a required subject for all pupils. Family Life Education is a one marking period course offered at James Caldwell High School as part of the Grade 11 Health and Physical Education curriculum. The major areas covered in the course are Male and Female Reproductive Systems, Sexual Decision Making, Abstinence and Birth Control, Fetal Development, Pregnancy, Childbirth, Sexually Transmitted Infections, Sexual Assault, Date Rape and Sexual Harassment. The course is designed to promote healthy sexual behaviors for the present and for the future.

**PHYSICAL EDUCATION 12 & HEALTH / SAFETY**

**Grade**.....12  
**Credits**.....5  
**Prerequisite**.....Physical Education 11

Physical Education is a required subject for all pupils. Grade 12 Health Education is a one marking period course offered at James Caldwell High School as part of the Grade 12 Health and Physical Education curriculum. Three major areas of health will be addressed: Mental Health, Lifestyle Diseases, and Drug and Alcohol Education. The course is designed to cover areas not previously covered in freshman, sophomore and junior health. As this course may be the last formal health education class experienced by these students, there is a great deal of emphasis placed on promoting healthy behaviors and lifestyles that the students can use in the future.

# SCIENCE

Science course sequence chart can be found on page 62

SCIENCE	Grade(s) Offered	Credits
Investigations in Biology	9	6
Biology I	9	6
Advanced Biology	11, 12	6
AP Biology	11, 12	6
Investigations in Chemistry & Physics	10	6
Chemistry I	10, 12	6
Chemistry Honors	10	6
Advanced Chemistry	11, 12	6
AP Chemistry	11, 12	6
Physics	11, 12	6
AP Physics C	11, 12	6
Environmental Science	11, 12	6
AP Environmental Science	11, 12	6
Research in Molecular Biology (DE)	11, 12	6
Anatomy & Physiology (DE)	11, 12	3
Marine Biology (DE)	11, 12	3
Forensic Science (DE)	11, 12	3
Organic Chemistry	11, 12	3

## INVESTIGATIONS IN BIOLOGY

**Grade.....9**

**Credits.....6**

**Prerequisite.....None**

Investigations in Biology is a laboratory-oriented course that stresses the five essential units of Biology science: Structure and Function, Matter and Energy in Organisms & Ecosystems, Interdependent Relationships in Ecosystems, Inheritance & Variation of Traits, and Natural Selection & Evolution. Each unit focuses on understanding the *main* scientific principles; data collection, graphing, and analysis; and communication of ideas. Classroom structure encourages emphasis on student organization and study skills.

## **BIOLOGY I**

<b>Grade</b> .....	<b>9</b>
<b>Credits</b> .....	<b>6</b>
<b>Prerequisite</b> .....	<b>None</b>

Biology I is a laboratory-oriented course that stresses the five essential units of Biological science: Structure and Function, Matter and Energy in Organisms & Ecosystems, Interdependent Relationships in Ecosystems, Inheritance & Variation of Traits, and Natural Selection & Evolution. Student should be comfortable with faster pace instruction and more independent learning than Investigations in Biology.

## **ADVANCED BIOLOGY**

<b>Grade</b> .....	<b>11, 12</b>
<b>Credits</b> .....	<b>6</b>
<b>Prerequisites</b> .....	<b>Biology I, Chemistry I</b>

Advanced Biology is an advanced, laboratory-oriented course for students who have been successful in their Biology I course. Advanced Biology is designed for those students with a serious interest in developing an in-depth knowledge of Biology and its practical application.

## **ADVANCED PLACEMENT BIOLOGY**

<b>Grade</b> .....	<b>11, 12</b>
<b>Credits</b> .....	<b>6</b>
<b>Prerequisites</b> .....	<b>Biology I, Chemistry I, and application process</b>

Advanced Placement (AP) Biology is designed for highly-motivated students interested in a challenging and intensive study of Biology. The students will learn facts, principles, and processes of Biology, along with the means by which biological information is collected and interpreted. The course will also focus on the formulation of hypotheses and predictions in scientific research, as well as the social and biological consequences of the human scientific endeavors. Students are strongly encouraged to take the Advanced Placement Examination in Biology. Many colleges will grant credit and/or appropriate placement to students who have success with this examination. To be successful in this course, students should have an average of 85 or above in Biology I.

## **INVESTIGATIONS IN CHEMISTRY & PHYSICS**

<b>Grade</b> .....	<b>10</b>
<b>Credits</b> .....	<b>6</b>
<b>Prerequisite</b> .....	<b>Investigations in Biology or Biology I</b>

Investigations in Chemistry & Physics exposes students to core concepts covered in detail during the full year Chemistry I and Physics classes. Emphasis is placed on the understanding of the main scientific principles found in physical science. Hands-on data collection and analysis builds analytical thinking and communication skills. Although mathematical computations are necessary, the process is carefully guided to address the mathematical abilities of each student. **Students who take Investigations in Chemistry & Physics will have to take Environmental Science to complete their 3 year science requirement.**

(refer to course sequence chart on page 62)

## **CHEMISTRY I**

<b>Grade</b> .....	<b>10, 12</b>
<b>Credits</b> .....	<b>6</b>
<b>Prerequisites</b> .....	<b>Biology I or Investigations in Biology and Algebra I</b>

Chemistry I is a basic course introducing students to the fundamentals of chemistry. Students intending to enter college or technical schools should take this course. It is also available to other students with strong math skills who are interested and motivated to take such a course. In this course, students are expected to solve multi-step math word problems.

## CHEMISTRY HONORS

<b>Grade</b> .....	<b>10</b>
<b>Credits</b> .....	<b>6</b>
<b>Prerequisites</b> .....	<b>Biology I &amp; Algebra I and successful completion of an assessment test</b>

Honors Chemistry, like Chemistry I, is a course introducing students to the fundamentals of Chemistry. Students will need exceptional math and problem solving skills to take this course. This course is for highly motivated students intending to take Advanced Placement science courses in the future.

## ADVANCED CHEMISTRY

<b>Grade</b> .....	<b>11, 12</b>
<b>Credits</b> .....	<b>6</b>
<b>Prerequisites</b> .....	<b>Algebra II (concurrent) and Chemistry I</b>

Advanced Chemistry is a course in which students will obtain knowledge in concepts not explored in Chemistry I. Students will also gain a greater understanding of processing information on a qualitative and quantitative level. Mathematical problem solving and application is emphasized.

## ADVANCED PLACEMENT CHEMISTRY

<b>Grade</b> .....	<b>11, 12</b>
<b>Credits</b> .....	<b>6</b>
<b>Prerequisites</b> .....	<b>Algebra II (concurrent), and Chemistry I, and application process</b>

Advanced Placement Chemistry is a rigorous, in-depth course which approximates most first-year college courses. The extensive quantitative laboratory work parallels classroom discussion. The major emphasis is placed on physical chemistry topics. The Advanced Placement curriculum materials are presented. Many colleges will grant credit and/or advanced placement status to students who are successful on the AP examination. It is strongly recommended that students take the AP examination in May. To be successful in this course, students should have an average of 92 or above in Chemistry I, have a strong mathematics background, and be highly motivated.

## PHYSICS

<b>Grade</b> .....	<b>11, 12</b>
<b>Credits</b> .....	<b>Chemistry I or Environmental Science, Algebra II (concurrent)</b>

Physics is a basic course concerned with matter and energy and the way in which they are interrelated. It includes units on mechanics, sound, light, and electricity. Laboratory exercises complement the study of those topics. The emphasis is on using mathematics to understand physical phenomena, as well as, the application of physics concepts to design solutions which address physical problems or challenges.

## ADVANCED PLACEMENT PHYSICS C

<b>Grade</b> .....	<b>11, 12</b>
<b>Credits</b> .....	<b>6</b>
<b>Prerequisites</b> .....	<b>Chemistry I, Precalculus Honors (concurrently), and application process</b>

Advanced Placement Physics C provides in depth, calculus based instruction in two major areas of physics: Mechanics and Electricity & Magnetism. This course provides a systematic introduction to the principles of Mechanics and Electricity & Magnetism with analysis and problem solving which includes the principles of differential and integral calculus. AP Physics C will serve as the foundation for those students planning to major in science or engineering. Students are encouraged to take the AP Physics C: Mechanics and/or the AP Physics C: Electricity & Magnetism examination offered by the College Board in May. Many colleges will grant credit and/or appropriate placement to students who are successful on the AP examination.

## **ENVIRONMENTAL SCIENCE**

**Grade.....11, 12**

**Credits.....6**

**Prerequisites.....Chemistry I or Investigations in Chemistry and Physics**

Environmental Science is a laboratory-oriented course that seeks to bring understanding to the type of environmental problems found today; their causes, their short and long-term effects and the methods that can be taken which will lead to solutions for these problems.

## **ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE**

**Grade.....11, 12**

**Credits.....6**

**Prerequisites.....Algebra II (concurrent) and Chemistry I, and application process**

This full year course is designed to be the equivalent of a one semester college course in environmental science. It is a rigorous course that stresses scientific principles and analysis and includes a laboratory component. The goal of the course is to provide students with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world, identify and analyze environmental problems (both natural and human made) and to evaluate risks associated with these problems. Students examine alternative solutions for resolving and/or preventing environmental problems, and develop their own perspective. It is strongly recommended that students take the AP examination in May. To be successful in this course, students should have an average of 85 or above in both Biology I and Chemistry I.

## **RESEARCH IN MOLECULAR BIOLOGY HONORS (DE)**

**Grade.....11, 12**

**Credits.....6**

**Prerequisites.....Biology I and Chemistry I**

By utilizing both biology and chemistry, students will explore many of the basic skills which are required to work in a molecular biology lab. This course provides students with the unique opportunity to participate in an authentic research project sponsored by Rutgers University. This is a Dual Enrollment (DE) course through Fairleigh Dickinson University. The classroom teacher will provide information on how interested students can register with the University for 3 college credits. An interest in science and a strong work ethic is required.

## **ANATOMY AND PHYSIOLOGY (DE)**

**Grade.....11, 12**

**Credits.....3**

**Prerequisite.....Chemistry I or Environmental Science**

In this class, the human body will be presented as a “marvel of biological engineering”. Students will learn about the human body from head to toe, inside and out. A cornerstone of the class will be a mammal dissection to illustrate the systems of the body; therefore, students must be comfortable with performing a dissection. This class can be beneficial to those students who are interested in pursuing a health-oriented career, as well as students interested in improving their general knowledge. This is a Dual Enrollment (DE) course through Seton Hall University. The classroom teacher will provide information on how interested students can register with the University for 4 college credits.

## **MARINE BIOLOGY (DE)**

**Grade.....11, 12**

**Credits.....3**

**Prerequisite.....Chemistry I or Environmental Science**

This elective course emphasizes the biodiversity of the oceans and the relationship each of these organisms has with humans. Students in this course will examine the major physical features of the marine environment and the habitats created by these features. Major marine ecosystems as well as the components that make them up will be examined. Students will complete their study of the marine environment by overviewing the

resources the sea has to offer and looking at the impact of humans on the marine environment. This is a Dual Enrollment (DE) course through Fairleigh Dickinson University. The classroom teacher will provide information on how interested students can register with the University for 3 college credits.

**FORENSIC SCIENCE (DE)**

**Grade.....11, 12**

**Credits.....3**

**Prerequisite.....Chemistry I or Environmental Science**

This one semester elective course combines principles and procedures from biology, chemistry, biotechnology, and mathematics, and utilizes inquiry-based sophisticated laboratory investigations as its focus. Students in this course will investigate fingerprint detection and identification, simple toxicological identification, glass fragment analysis, ink analysis and forged document detection, blood typing and blood spatter analysis, and trace evidence analysis including hair and fibers. This is a Dual Enrollment (DE) course through Fairleigh Dickinson University. The classroom teacher will provide information on how interested students can register with the University for 3 college credits.

**ORGANIC CHEMISTRY**

**Grade.....11, 12**

**Credits.....3**

**Prerequisite.....Chemistry I**

Organic chemistry is designed as an advanced chemistry course for students who were successful in first year chemistry. It might be particularly beneficial to students who plan to major in medicine, pharmacology, biology, and chemistry. During the semester, alkanes, alkenes, alkynes, dienes, aromatic compounds, alcohols, reaction mechanisms, and spectroscopy will be studied. Laboratory work will include finding melting points, recrystallization, and the synthesis of organic compounds.

## **SOCIAL STUDIES**

<b>SOCIAL STUDIES</b>	<b>Grade(s) Offered</b>	<b>Credits</b>
Freshman Honors Seminar	9	5
World Cultures	9	5
United States History I	10	5
Advanced Placement US History I	10	5
United States History II	11	5
Advanced Placement US History II	11	5
Personal Finance & Literacy	10, 11, 12	2.5
Economics	11, 12	2.5
<b>SOCIAL STUDIES ELECTIVES</b>	<b>Grade(s) Offered</b>	<b>Credits</b>
Legal Studies	11, 12	2.5
Supreme Court	11, 12	2.5
Introduction to Sociology (DE)	10, 11, 12	2.5
American Diplomatic History	11, 12	2.5
Human Behavior	10, 11, 12	2.5
Political Theory	10, 11, 12	2.5
Holocaust & Genocide (DE)	11, 12	2.5
Advanced Placement Human Geography	10, 11, 12	5
Advanced Placement European History	11, 12	5
Advanced Placement US Government and Politics	12	5

### **FRESHMAN HONORS SEMINAR**

**Grade.....9**

**Credits.....5**

**Prerequisite.....None**

The Freshman Honors Seminar is a humanities based elective that exposes students to an honors level curriculum that will strengthen their knowledge and skills related to the English 9 and World Cultures interdisciplinary program. Instruction, assignments, and projects in the seminar will supplement materials and concepts studied in the Social Studies and English classes. As a full-year honors level course, marking period and final grades will be weighted accordingly. This course is recommended for students who are interested in taking AP History and/or English 10 Honors in their sophomore year or either of the AP English courses in Grades 11 or 12. **This course is a 5 credit course that meets regularly during normal school hours. A student's grade in this course will no longer impact English or Social Studies course grades.**

## **WORLD CULTURES**

<b>Grade</b> .....	<b>9</b>
<b>Credits</b> .....	<b>5</b>
<b>Prerequisite</b> .....	<b>None</b>

World Cultures is taught in conjunction with English 9. This course is intended to provide an interdisciplinary, humanities-based program for ninth graders which will allow students to study a number of different cultures from several viewpoints. The politics, history, culture, economics, and social structures of these peoples will be investigated to understand their contributions to a world culture. Units on culture and the cultural experience in America will also be studied. Students will develop and utilize analytical skills and research techniques through the integration of skills in reading, writing, expression, usage, and vocabulary.

## **US HISTORY I**

<b>Grade</b> .....	<b>10</b>
<b>Credits</b> .....	<b>5</b>
<b>Prerequisite</b> .....	<b>World Cultures</b>

This course will examine the geographic, economic, political, sociological, philosophical, and anthropological origins of the United States. It will examine the force which shaped that portion of our national history through the post-reconstruction era. Special emphasis will be given to understanding the Constitution of the United States and its impact on the development of our nation. All students who enroll in US History I are required to enroll in U.S. History II. They may also take any of the social studies electives.

## **U.S. HISTORY II**

<b>Grade</b> .....	<b>11</b>
<b>Credits</b> .....	<b>5</b>
<b>Prerequisite</b> .....	<b>U.S. History I</b>

This course complements U.S. History I and picks up the study of our nation's history with "Immigration and Urbanization-1877-1900". This second section of the state-required two years of U.S. History will focus on the groups and developments which produced the modern industrial, internationalist and pluralistic United States of the twentieth and twenty-first centuries.

## **ADVANCED PLACEMENT U.S. HISTORY I & II**

<b>Grade</b> .....	<b>10, 11</b>
<b>Credits</b> .....	<b>5 per year</b>
<b>Prerequisites</b> .....	<b>World Cultures and application process</b>

These courses are part of the nationwide Advanced Placement Program of the College Board and surveys American history from the colonial period to the present. The course is designed for able, highly-motivated students who enjoy history and would profit from an intensive study which stresses analysis and interpretation of events. Students are strongly encouraged to take the Advanced Placement Examination in American History their junior year. Most colleges reward a high score on the test by granting college credit or exempting students from introductory requirements in American History. The Advanced Placement U.S. History course will follow a two-year sequence. Therefore, sophomores who elect to start AP U.S. History are expected to make a two-year commitment to this program.

## **PERSONAL FINANCE & LITERACY**

<b>Grade</b> .....	<b>10, 11, 12</b>
<b>Credits</b> .....	<b>2 ½</b>
<b>Prerequisite</b> .....	<b>None</b>

Personal Finance is a one semester course that introduces students to the importance of financial management. From career planning to strategies for saving and investing, the course provides students with the practical skills necessary for establishing and attaining financial goals. Topics such as credit and debt management and insurance are also stressed in the course. Finally, the course challenges students to become critical consumers and understand their roles in the local, national, and global economies.

**ECONOMICS**

<b>Grade</b> .....	<b>11, 12</b>
<b>Credits</b> .....	<b>2 ½</b>
<b>Prerequisite</b> .....	<b>U.S. History I</b>

**This course fulfills the state requirement for Personal Financial Literacy**

This one semester course is designed to introduce the student to the principles and concepts of economics. Students will analyze the philosophies of economic theory related to topics such as; supply and demand, and the business firm and market structure. Additionally, the course will examine the different types of economic systems and the role of the Federal Reserve in the U.S. financial system. This is a more advanced course than Personal Finance and is intended for students interested in pursuing careers in economics or business.

**SOCIAL STUDIES ELECTIVES**

**LEGAL STUDIES**

<b>Grade</b> .....	<b>11, 12</b>
<b>Credits</b> .....	<b>2 ½</b>
<b>Prerequisite</b> .....	<b>None</b>

This course will focus on some of the basic tenets of law as they affect the citizen and will also examine the application of the law. Significant attention will be given to the police, the courts and the prisons and the methods by which they apply the law, as well as their problems and effectiveness in doing so. A portion of the course will deal with civil matters, such as torts, family law, and landlord-tenant relations.

**SUPREME COURT**

<b>Grade</b> .....	<b>11, 12</b>
<b>Credits</b> .....	<b>2 ½</b>
<b>Prerequisite</b> .....	<b>U.S. History I</b>

Supreme Court uses a college casebook for the study of actual cases which have shaped our interpretation of the Constitution. Students will study the history of the court and its decisions, analyzing the court calendar on a daily basis for interesting cases. Reading assignments are not long, but they involve considerable thought since the Constitutional issues involved are often complex.

**INTRODUCTION TO SOCIOLOGY (DE)**

<b>Grade</b> .....	<b>10, 11, 12</b>
<b>Credits</b> .....	<b>2 ½</b>
<b>Prerequisite</b> .....	<b>None</b>

This one semester course will examine the scientific study of human society. The course will expose the student to the foundations and basic concepts of sociology, as well as to the work of renowned sociologists. It will focus on various topics of social life including: culture, class, interaction, deviance, gender, race, economic status, politics, religion, family life, education and the effects of social change. Through the study of investigative sociology students will learn and implement research methods and will gain experience in interpretation and statistical representation of data. Students will also learn to classify theories, think critically and apply current news and behavioral trends. This is taught like a college course, using a college text. This is a Dual Enrollment (DE) course through Seton Hall University. The classroom teacher will provide information on how interested students can register with the university for 3 college credits.

**AMERICAN DIPLOMATIC HISTORY-Cold War-Present**

<b>Grade</b> .....	<b>11, 12</b>
<b>Credits</b> .....	<b>2 ½</b>
<b>Prerequisite</b> .....	<b>U.S. History I</b>

This one semester course investigates the creation and application of U.S. Foreign Policy since 1945. It is

designed to give students an understanding of how and why the U.S. structures its foreign policy and the key tools it employs to achieve its goals. Students will also gain skills that will help them critically analyze American international relations, past and present. It is meant to be complementary to, not redundant of, current U.S. History II courses. The course will focus primarily on major policy initiatives, treaties and institutions of American diplomacy from the 1970's to present day. Major topics include the Cold War, the Arab-Israeli Conflict and the Muslim world.

**HUMAN BEHAVIOR**

**Grade.....10, 11, 12**  
**Credits.....2 ½**  
**Prerequisite.....None**

This course introduces the student to the study of psychology and human behavior. The course focuses on the mind, behavior, and memory. Students will examine such topics as the conscious mind, intelligence, and learning. Additionally, students will be expected to compare and analyze the major theories and theorists. Students will primarily use projects and presentations to apply their knowledge of the course material.

**POLITICAL THEORY**

**Grade.....10, 11, 12**  
**Credits.....2 ½**  
**Prerequisite .....None**

This course introduces students to an overview of political and social theory and philosophy. Students will be exposed to political ideas and arguments that have shaped Western thought and Western political and social institutions. This is a survey course which emphasizes selected philosophers, themes and their critiques. Students will make connections between modern governments and political parties and their origins in western political theory. Students will also draw comparisons between the various philosophies and will learn to form and justify opinions by critically evaluating these philosophies. Students will be exposed to a plethora of primary documents which they will learn to analyze and evaluate. Students will be required to engage in educated discourse in defense of their opinions.

**HOLOCAUST AND GENOCIDE (DE)**

**Grade.....11, 12**  
**Credits.....2½**  
**Prerequisite.....None**

This course will focus on the Nazi Holocaust of WW II, but students will work to connect the lessons of that event to similar challenges the world currently faces. The Holocaust will serve as an example in a larger investigation of prejudice, discrimination and genocide. Students will work to understand the conditions that created the Holocaust from centuries-old Antisemitism to Nazi propaganda. Students will then study the execution of the Holocaust from ghettos to the Nuremberg Trials. Students will have the chance to define their own responsibility as citizens of the world and to implement the Holocaust's lessons into their daily lives. The course will seek to engage the intellectual curiosity of students in order to inspire critical thought and personal growth. This is a Dual Enrollment (DE) course through Fairleigh Dickinson University. The classroom teacher will provide information on how interested students can register with the university for 3 college credits.

**ADVANCED PLACEMENT HUMAN GEOGRAPHY**

**Grade.....10, 11, 12**  
**Credits.....5**  
**Prerequisites.....AP U.S. History I & II are highly recommended and application process**

The purpose of the AP course in Human Geography is to introduce students to the study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students will study landscape and spatial concepts to analyze human social organization and its environmental consequences. This course is an excellent companion to AP Environmental Science.

**ADVANCED PLACEMENT EUROPEAN HISTORY**

**Grade.....11, 12**

**Credits.....5**

**Prerequisites.....AP US History I is highly recommended and application process**

The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which we live. In addition to providing a basic narrative of events and movements, the goals of the AP program in European History are to develop 1) an understanding of some of the principal themes in modern European History, 2) an ability to analyze historical evidence, and 3) an ability to analyze and express historical understanding in writing.

**ADVANCED PLACEMENT U.S. GOVERNMENT AND POLITICS**

**Grade.....12**

**Credits.....5**

**Prerequisites.....AP U.S. History I & II are highly recommended and application process**

This full year AP course in U.S. Government and Politics will give students an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs and ideas that constitute U.S. political reality. Topics include: 1) Constitutional underpinnings of U.S. government, 2) political beliefs and behaviors, 3) political parties and interest groups, 4) institutions and policy processes and 5) civil rights and civil liberties.

# VOCATIONAL TECHNICAL OPPORTUNITIES

Students who wish to pursue a vocational-technical program may attend Essex County Schools of Technology (ECST). The programs are generally 3-4 year programs and should begin in freshman or sophomore year. Students can opt to divide their day between the vocational school and JCHS or attend ECST full time. Admission is based on attendance records, as well as motivation, space availability and individual program requirements. See the website for more information: [www.essextech.org/west-caldwell-tech/](http://www.essextech.org/west-caldwell-tech/)

## ESSEX COUNTY SCHOOL OF TECHNOLOGY CAREER & TECHNICAL EDUCATION (CTE) PROGRAMS

● Agricultural, Food & Natural Resources	● Hospitality & Tourism
● Architecture & Construction	● Human Services
● Art, A/V Technology & Communication	● Information Technology
● Business Management & Administration	● Law, Public Safety, Corrections & Security
● Education & Training	● Manufacturing
● Finance	● Marketing
● Government & Public Administration	● Science, Technology, Engineering & Mathematics
● Health Science	● Transportation, Distribution & Logistics

# WORLD LANGUAGES

WORLD LANGUAGES	Grade(s) Offered	Credits
Spanish Communication and Culture I	9, 10, 11, 12	5
Spanish Communication and Culture II	10, 11, 12	5
Spanish Communication and Culture III	11, 12	5
Spanish I	9, 10, 11, 12	5
Spanish II	9, 10, 11, 12	5
Spanish III	10, 11, 12	5
Spanish IV	11, 12	5
Spanish V	12	5
AP Spanish	12	5
Italian I	9, 10, 11, 12	5
Italian II	9, 10, 11, 12	5
Italian III	10, 11, 12	5
Italian IV	11, 12	5
AP Italian	12	5
Latin I	9, 10, 11, 12	5
Latin II	10, 11, 12	5
Latin III	11, 12	5
Latin IV Honors (DE)	12	5
Classical Mythology	9, 10, 11, 12	2.5

## **SPANISH – COMMUNICATION AND CULTURE I**

**Grade**.....9, 10, 11, 12

**Credits**.....5

**Prerequisite**.....None

This course is an introduction to the Spanish language and culture, emphasizing cultural knowledge and exploration with basic interpersonal conversational skills that allow students to exchange basic needs and preferences in the target language. The language is presented within the context of the contemporary Spanish speaking world and its culture. Authentic materials and technology will be used to enhance the topics covered. Students will learn to perform basic language functions such as asking questions and describing themselves and the world around them. Students will be able to perform these tasks at an appropriate level of accuracy using interpersonal, interpretive, and presentational modes. Students will learn about the geography of the

Spanish-speaking world as well as how Spanish-speaking countries have influenced the culture of the United States. Students will study Hispanic music and an in-depth study of the Dominican Republic.

### **SPANISH I**

**Grade.....9, 10, 11, 12**

**Credits.....5**

**Prerequisite.....None**

The student will learn the basic skills of comprehension, speaking, reading, and writing. Emphasis is placed on pronunciation, correct structural usage, and acquisition of active and relevant vocabulary. Oral drills, dictation, dialogues, narrative reading for comprehension, and cultural focus contribute to the basis for mastery on a beginning level.

### **SPANISH – COMMUNICATION AND CULTURE II**

**Grade.....10, 11, 12**

**Credits.....5**

**Prerequisite.....Spanish – Communication and Culture I**

This course will continue to emphasize the four skills of listening, speaking, reading, and writing that began in Level I. Constant reentry into past lessons will be part of each new lesson. The language is presented within the context of the contemporary Spanish-speaking world and its culture. Authentic materials and technology will be used to enhance the topics covered. Students will learn to perform a variety of language functions such as expressing their preferences in regards to foods, expressing possession, and describing locations. Students will be able to perform these tasks at an appropriate level of accuracy using interpersonal, interpretive, and presentational modes. Students will learn about home and school life utilizing house, food, family, and school vocabulary. The cultural focus this year will be the effects of immigration and an in-depth study of Guatemala and Peru.

### **SPANISH II**

**Grade.....9, 10, 11, 12**

**Credits.....5**

**Prerequisite.....Spanish I**

Students will further develop their novice level Spanish language skills. New vocabulary and grammar increase the students' range of ability to communicate. Authentic cross-cultural activities further build students' language ability and knowledge of other cultures. Technology continues to be an integral part of the program.

### **SPANISH – COMMUNICATION AND CULTURE III**

**Grade.....11, 12**

**Credits.....5**

**Prerequisite.....Spanish Communication and Culture II or Spanish I (teacher recommendation)**

This course will continue to emphasize the four skills of listening, speaking, reading, and writing that began in levels 1 & 2. The language is presented within the context of the contemporary Spanish-speaking world and its culture. Constant reentry into past lessons will be a part of each new lesson. Authentic materials and technology will be used to enhance the topics covered. Students will learn to perform a variety of language functions such as giving and following directions around town, navigating an airport and hotel, communicating their medical needs, and interpreting instructions from medical professionals. Students will be able to perform these tasks at an appropriate level of accuracy using interpersonal, interpretive, and presentational modes. Students will learn skills for traveling abroad utilizing travel, directions, and medical vocabulary. The cultural focus this year will be a virtual trip around Spain exploring the many sights, literature, and artwork. Students will also focus on the history of Argentina and compare/contrast its history with their prior knowledge of other countries studied.

### **SPANISH III**

**Grade**.....10, 11, 12

**Credits**.....5

**Prerequisite**.....Spanish II

Students will build upon all language skills and cultural knowledge acquired in previous levels and will begin to use it with increasing frequency in authentic, real-life situations. Vocabulary and grammar learning continue in a meaningful context. Resources and materials include books, audio and video resources, as well as all other available technology that can enhance cultural knowledge and language acquisition.

### **SPANISH IV**

**Grade**.....11, 12

**Credits**.....5

**Prerequisite**.....Spanish III

As student's progress in Spanish IV, they will learn to engage in more complex oral interactions. They will also read and interpret more challenging texts and more thoroughly understand spoken Spanish. A much greater emphasis is placed on the use of authentic audio, video, and print sources to expose students to Spanish as it is used in real-world situations. Spanish IV offers a more detailed study of Hispanic history and culture, presented entirely in Spanish.

### **SPANISH V**

**Grade**.....12

**Credits**.....5

**Prerequisite**.....Spanish IV

This course will explore a variety of topics related to events and themes that have shaped Latin America and Spanish culture. Course topics may include: an examination of topics relating to twentieth-century Latin American history, the exploration of major historic events and themes that have shaped Latin American and Spanish history, and discussion of different sociocultural issues related to Spain and other countries. Throughout all parts of the course, students will expand vocabulary necessary for everyday situations and an understanding of the cultural content of both Spain and other Spanish-speaking countries, and they will develop and improve grammar at an advanced level. Students will be able to understand different communication registers, do presentations, and participate in discussions that they will choose from the content of the course. This course will be conducted in Spanish and will include a review of relevant grammar and vocabulary concepts as they relate to the topics.

### **ADVANCED PLACEMENT SPANISH**

**Grade**.....12

**Credits**.....5

**Prerequisite**.....Spanish IV

This course is available to motivated students who wish to continue to develop their proficiency and knowledge of Spanish language and Hispanic culture. Increased competency in oral skills, composition, and grammar will be stressed. Extensive and fluent expression will be developed and expanded through the study of a variety of topics and issues pertinent to Hispanic language and culture. Students in this course will survey and study various periods of Hispanic history through intensive reviews, practical application exercises, and projects. Reading, vocabulary development, and composition work will be extensive. The course is conducted entirely in Spanish, and students are expected to be able to participate in all classroom activities while solely relying on their Spanish language skills. Students are expected to take the Advanced Placement Spanish Language Exam at the end of the year.

**ITALIAN I**

**Grade.....9, 10, 11, 12**

**Credits.....5**

**Prerequisite.....None**

The students will learn the basic skills of comprehension, speaking, and writing. Emphasis is placed on pronunciation, correct structural usage and acquisition of active and relevant vocabulary. Dialogues, narrative reading and cultural focus contribute to the basics for mastery at the introductory level.

**ITALIAN II**

**Grade.....9, 10, 11, 12**

**Credits.....5**

**Prerequisite.....Italian I**

The students will learn advanced skills of comprehension, speaking, reading and writing. Emphasis will be placed on speaking, grammar points and cultural units. Advanced speaking activities, short stories of comprehension and a cultural focus will contribute to the language at an intermediate level.

**ITALIAN III**

**Grade.....10, 11, 12**

**Credits.....5**

**Prerequisite.....Italian II**

The students reinforce the concepts of comprehension, reading and writing in the target language with a primary focus on speaking. Emphasis is placed on the following: listening and speaking activities, structural use of advanced tenses, grammar and acquisition of active and relevant vocabulary. Dialogues, narrative readings, and a large cultural focus will contribute to the curriculum at an advanced level. Some of the cultural units include Italian food, family life, academic life and travel.

**ITALIAN IV**

**Grade.....11, 12**

**Credits.....5**

**Prerequisite.....Italian III**

As students progress in Italian IV they will utilize the concepts of comprehension, reading, and writing in the target language with a primary focus on speaking for fluency. Authentic Italian literature will be introduced in the forms of newspapers, magazines, and novels. A large cultural focus will contribute to the curriculum at an advanced level. Some of the cultural units we will be focusing on are the Italian government, the education system, Italy’s traffic problem, the environment, and other crucial and relevant social issues.

**ADVANCED PLACEMENT ITALIAN**

**Grade.....12**

**Credits.....5**

**Prerequisite.....Italian IV**

This course is available to motivated students who wish to continue to develop their proficiency and knowledge of Italian language and culture. Increased competency in oral skills, composition, and grammar will be stressed. Extensive and fluent expression will be developed and expanded through the study of a variety of topics and issues pertinent to Italian language and culture. Students in Advanced Placement Italian will survey and study various periods of Italian literature, history and civilization, through intensive reviews, practical application exercises and projects. Reading, vocabulary development, and composition work will be extensive. The course is conducted entirely in Italian, and students are expected to be able to participate in all classroom activities while solely relying on their Italian language skills. In addition, students will be encouraged to take the Advanced Placement Exam in Italian.

## LATIN I

**Grade**.....9, 10, 11, 12

**Credits**.....5

**Prerequisite**.....None

Latin I is designed to prepare students to develop the capacity to read simple Latin with some ease. To this end, grammatical structures are stressed. Vocabulary building is an integral part of the course. In addition, various aspects of Roman culture are studied. The use and application of Latin in the modern world is emphasized.

## LATIN II

**Grade**.....10, 11, 12

**Credits**.....5

**Prerequisite**.....Latin I

Preparation of students to read longer and more complex Latin passages, after an intensive review of Latin fundamentals, is the emphasis in Latin II. Advanced grammatical structures are introduced, and vocabulary items are strongly drilled. Additional topics of Roman civilization are introduced, but the major emphasis is on reading heroic legends and mythological pieces.

## LATIN III

**Grade**.....11, 12

**Credits**.....5

**Prerequisite**.....Latin II

The initial emphasis is placed on review and mastery of second year grammar and vocabulary. Various individual writings by authentic Latin authors are employed. There is a focus on the classical hero, and Caesar is the major writer investigated.

## LATIN IV HONORS (DE)

**Grade**.....12

**Credits**.....5

**Prerequisite**.....Latin III

The major focus of Latin IV Honors is the Aeneid of Vergil. Projects on a special topic or genre are assigned when appropriate. At regular intervals, students present portions of their work orally to the class for discussion and evaluation. In classes where the level of achievement and background warrant, a survey of Latin literature may be undertaken. This is a Dual Enrollment (DE) course through Seton Hall University. The classroom teacher will provide information on how interested students can register with the university for 6 college credits.

## CLASSICAL MYTHOLOGY

**Grade**.....9, 10, 11, 12

**Credits**.....2.5

**Prerequisite**.....none

This course will present an overview of mythology in terms of definitions, interpretations, and influences, in relationship to saga, legend, folklore, and in conjunction with etiology, allegory, and ritual. Students will be provided an expansive background for the understanding of Greco-Roman civilization and culture. This course will demonstrate an interdisciplinary approach dependent upon exposure to and integration of methodologies in the disciplines of literature, geography, history, art and architecture, psychology, and religion. This course is designed for students wanting an overview of the Classical mythological landscape and how it has evolved from the Greco-Roman ages. *This course is an elective and does not meet the Graduation Requirement for World Language. Pending Board Approval.*

# SEQUENCES OF MATHEMATICS COURSES

GRADE 9	GRADE 10	GRADE 11	GRADE 12
Algebra I Concepts	Geometry Concepts	Algebra II Concepts	Math Analysis
Algebra I	Geometry Or Geometry Honors	Algebra II Or Algebra II Honors	Precalculus Or Precalculus Honors Or Math Analysis Or Statistics
Geometry	Algebra II	Precalculus Or Precalculus Honors Or AP Statistics	Calculus Or AP Calculus Or Statistics Or AP Statistics
Geometry Honors	Algebra II Honors	Precalculus Or Precalculus Honors Or AP Statistics	Calculus Or AP Calculus Or Statistics Or AP Statistics

# SEQUENCES OF SCIENCE COURSES

GRADE 9	GRADE 10	GRADE 11	GRADE 12
Investigations in Biology (with lab)	Investigations in Chemistry & Physics (with lab)	Environmental Science (full year)	Chemistry Or Electives I
Biology I	Chemistry I Or Chemistry Honors	Physics Or Environmental Science Or Electives I or II	Physics Or Environmental Science Or Electives I or II

## ELECTIVES I

- Anatomy & Physiology (½ year)
  - Forensics (½ year)
  - Marine Biology (½ year)

**Prerequisites for Electives I:** Biology I or Investigations in Biology AND Chemistry I or Environmental Science

## ELECTIVES II

- Advanced Biology
- Advanced Chemistry
- Organic Chemistry (½ year)
  - AP Biology
  - AP Chemistry
- AP Environmental Science
  - AP Physics C
- Research in Molecular Biology

**Prerequisite for Electives II:** Chemistry I