## KITTATINNY REGIONAL HIGH SCHOOL



## CURRICULUM GUIDE FOR GRADES 9 - 12

(Updated January 2021)

# Kittatinny Regional High School Curriculum Guide 

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# Kittatinny Regional High School Curriculum Guide 

## Foreword

Our curriculum has been designed to provide students with the opportunity to plan individual programs of study. We feel that a strong foundation in basic skills combined with a broad general background is essential if students are to adjust to the demands of a complex and rapidly changing society.

Cooperative planning of programs with teachers, counselors, students, and parents is extremely important. The selection of subjects should be geared to each student's interests and abilities, and should fit into an overall plan for the student's high school years. Careful planning should lead to a possible career path or further education following graduation. Thoughtful planning will help to make the best of the opportunities available at Kittatinny Regional High School.

Feel free to call upon the Guidance Department and Administrators at any time regarding questions that may arise concerning any aspect of the school program. We have planned to make your years at Kittatinny Regional High School exciting, rewarding and enjoyable.

## Guidance Department Services

The primary function of the Guidance Department is to aid (not direct) students in the process of their decision-making. Students (and their parents) are encouraged to make full use of our facilities and counselors to solve problems, which are academic, vocational, or social in nature.

Students are assigned a school counselor on two separate occasions during their educational experience at Kittatinny; once as they enter grades 7 and 8; and again, as they embark on their high school career in grades 9 through 12.

In addition to individual and group counseling, we offer many other aids to our students. Visitors from colleges and the military community will frequently be available on our campus to speak to student groups. College/Career Fairs are scheduled yearly and should be utilized by students. Internet access and the Naviance program are also available. Other services include working papers, referrals to special services, testing programs, and vocational placement.

Please take advantage of our services as often as possible.

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## General Information

## Policy: Extracurricular and Co-Curricular Activities

The Kittatinny District Board of Education believes individual students will benefit through opportunities to grow both physically and intellectually. In addition to academics, the school provides the opportunity for students to participate in a full complement of sports and activities. Although the school encourages student involvement, student participation shall not be at the expense of academic achievement.

## Student Eligibility - Academic

A. Pupil participation shall not be at the expense of academic achievement.

1. To be eligible for athletic/extracurricular participation during the first semester or fall season (August through January) students enrolled in the 1oth grade or higher, or the second year of attendance in the secondary school or beyond, a pupil must have passed seven courses required by Kittatinny Regional High School. All courses are included in this determination.
2. In order to be eligible for athletic/extracurricular participation during the second semester (February 1 to June 30) students enrolled in the 9th grade or higher, a pupil must have passed the equivalent of 7 courses required by Kittatinny Regional High School at the close of the preceding semester (approximately January 31).
B. If a student does not meet the academic requirements as outlined in category A for any semester, the student will immediately be denied participation in grades 9-12 athletic teams and extracurricular activities for the semester, e.g., Yearbook, Cheerleaders, Color Guard, Marching Band, Madrigals, Drama productions, National Honor Society, Tapestry, Student Council, Intramurals, Ski Club, Class Officer, etc. The preceding list is representative of clubs and activities and should not be construed to be final in listing. Eligibility to participate will be reinstated at the end of the non-participating semester if academic standards are met.
C. Determination of academic eligibility is the responsibility of the Head Coach or the activity advisor working in conjunction with the Director of Athletics and/or the Guidance Department.
D. Academic eligibility requirements for participation in athletic and other extracurricular activities affect all students in the school. (Classified students can be exempt from said policy only if their IEP designates such.)
E. Eligibility is determined by grades received at the end of each semester, mid-year grades, and final year grades.

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F. Summer school work to make-up course deficiencies can be applied toward the reinstatement of eligibility.
G. Suspension from school prohibits the participation in the attendance of activities of the school during the time of the suspension - - inclusive of all athletic events and practices and extracurricular activities and rehearsals/ practices.
H. Time of arrival: Students who enter school later than 11:00 a.m. are prohibited from participating in school- sponsored extracurricular activities later in that day or evening. Exceptions to the designated time of arrival may be granted for unusual circumstances by the Assistant Principal and/or Principal.
I. In addition to complying with all local requirements, students participating in the interscholastic program must also meet all eligibility requirements of the New Jersey Interscholastic Athletic Association (NJIAA).
J. Any appeal of the eligibility criteria must be made through the Office of the Principal.

## Graduation Requirements

The following are the minimum graduation requirements necessary to receive a Kittatinny Regional High School diploma as deemed by the Kittatinny Board of Education and the State of New Jersey.

1. A student must complete a minimum of 140 credits.

- A full year course equals 5 credits and a half year course equals 2.5 credits.

Exceptions:

- A full year science lab course equals 6 credits.
- A full year Elective class or Physical Education class will have one 1 credit deducted if a science lab is taken during that period since the class will be missed 1 day per week.
- A failed course equals zero credit and no credit given for study hall.

2. A student must pass the New Jersey Student Learning Assessment (NJSLA) or equivalent state approved testing pending their grade level.
3. A student must pass 4 years of Physical Education and Health.

## 4. A student must pass all required Academic Courses:

- 4 courses in English. (20 Credits)
- 3 courses in Mathematics including Algebra I, Geometry \& at least one additional year of rigorous Math. (15 Credits)
- 3 courses in Science including Biology/Lab, Chemistry/Lab, and Physics/Lab. (15 Credits)
- 3 courses in Social Studies including 1 World History class and 2 American History classes. (15 Credits)
- 1 course in World Language. (5 credits)

5. A student must pass the equivalent of 5 full year elective courses in addition to a course in Personal Financial Management. Elective courses must include the following:

- The equivalent of 1 full year elective course in the area of "Visual and Performing Arts" which includes courses in the following areas: Drama, Video Production, Digital Photography, Band, Chorus, Music Theory or Art. (5 Credits)
- The equivalent of 1 full year elective course in the area of "Twenty-first Century Life and Careers" which includes courses in the following areas: Business, Computer Science, Engineering, Robotics, Technology, Structured Learning Environment (SLE), Video, Woodshop, Clothing or Graphics. (5 Credits)


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## Graduation Requirements

## (continued)

- 1 Elective course in the area of "Financial Literacy" which includes courses in the following area: Personal Financial Management. (2.5 Credits)
- Additionally, the equivalent of 3 full year elective courses in the "Visual and Performing Arts" and/or "Twenty-first Century Life and Careers" areas. (15 Credits)
- By completing the required elective courses in these areas, a student also fulfills the state requirement Technology education.


## 6. Additional Courses:

- Students are advised to take additional academic or elective classes if their schedule permits.
- Keep in mind any additional academic courses out of the English, Enrichment, Mathematics, Science, Social Studies or World Language Departments do not count as part of the "required 6 elective classes" other than Drama. Drama can count as an English class or a Visual and Performing Arts class, but not both. Classes such as Sociology, Creative Writing, Anthropology, Environmental Science, etc. are academic electives and do not meet the graduation requirement concerning "required electives."


## 7. Additional Requirements:

- A student must register yearly for a minimum of $\mathbf{3 5}$ credits.
- A student must have a minimum of four academic classes. This excludes senior SLE students who are required to take three academic classes.
- A student cannot have 9 unexcused absences in a $1 / 2$ year course or 18 unexcused absences in a full year course per year. Loss of credit due to excessive absences can keep a student from graduating on-time.


## Credit Requirements

Total credits for graduation will equal 140.
National Honor Society
Membership in the National Honor Society is the highest award conferred on a member of the study body. Induction into the Society will be held for Juniors and Seniors each year. Eligibility is based on a minimum cumulative GPA of 90. Eligible candidates are invited to apply after their sophomore or junior year. A faculty committee will select applicants for membership based on scholastic achievement, leadership, service and character.

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## Graduation Requirements

(continued)

## Marking System

Credits: A detailed description of the marking system will be found in the Student Handbook.

| Grades | Grading Scale |
| :---: | :---: |
| A | $\mathbf{1 0 0}-90$ |
| B | $\mathbf{8 9 - 8 0}$ |
| C | $\mathbf{7 9 - 7 0}$ |
| D | $\mathbf{6 9 - 6 0}$ |
| F | $\mathbf{5 9 - 0}$ |

Credits are given for the number of periods per week that a course meets. Half-year courses receive half-credits, i.e., English meets five (5) days per week for a full year and is, therefore, awarded five (5) credits.

## Rank in Class

This indicates a student's relative position with respect to all members of the class. Student rank is determined at the end of each year. Senior students are also given a seventh semester or three and one-half year rank. This rank is primarily used by colleges for scholarship purposes to help them evaluate applicants.

## Testing Program

A complete testing program has been established to evaluate the growth of our students. It is also a guide to the faculty to ascertain that they are reaching their teaching objectives. Tests are also available from outside agencies, i.e., the College Entrance Examination Board, (Preliminary Scholastic Aptitude Test - National Merit Scholarship Qualifying Test, the Advanced Placement Tests, the Scholastic Aptitude Test and the Scholastic Aptitude Subject Test), the Armed Services Vocational aptitude Battery, and the American College Testing Program. The results are used to evaluate student progress toward mastering New Jersey Core Curriculum Content Standards and, ultimately, to assist them in preparing for the NJSLA.

## State Mandated Testing and Basic Skills Remediation

Students enrolled in grades 9 and 10 in the following courses will participate in state mandated New Jersey Student Learning Assessments (NJSLA):

| Course | Course |
| :---: | :---: |
| $\bullet$ Algebra I | $\bullet$ English I |
| $\bullet$ Geometry | $\bullet$ American Lit |
| $\bullet$ Algebra II |  |

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## Graduation Requirements

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Students who fall below the passing score will be urged to enroll in an English or Math remediation program.

Students must pass state testing as part of their graduation requirements.
Students enrolled in the 11th grade are now required to take the New Jersey Science Assessment. The Science test measures students' knowledge of related Core Curriculum Content Standards. At this time, student performance is not tied into any graduation requirements. Students enrolled in $11^{\text {th }}$ grade will participate in state mandated New Jersey Graduation Proficiency Assessment (NJGPA).

## Independent Study

Students who are working on Independent Study Programs must first obtain approval from their counselor, subject teacher, and department head. Opportunity for Independent Study is offered in each subject area. Approved programs will be evaluated on a contractual basis - for either half-year (2.5) credits or full year (5.0) credits.

## Weighting of Courses

The following courses are all weighted to determine Honor Roll, National Honor Society eligibility, and class rank. Although the permanent record grade is not changed, AP courses receive an additional ten (10) points. Honors courses receive an additional eight (8) points.

| Business and Technology | Science | Visual and Performing <br> Arts |
| :--- | :--- | :--- |
| AP Computer Science Principles | Biology I Honors | AP Music Theory |
| AP Computer Science A | Chemistry I Honors | AP 3D Studio |
| English | AP Chemistry II | AP Drawing |
| English I Honors | AP Physics I | AP 2-D Art \& Design |
| English II Honors | AP Physics II | World Languages |
| AP English Language \& Composition | AP Physics C Mechanics | French IV Honors |
| AP English Literature \& Composition | AP Environmental Science | German IV Honors |
| Math | Forensics Honors | Spanish IV Honors |
| Algebra II Honors | Anatomy and Physiology Honors | AP Spanish |
| Geometry I Honors | AP Physics C Electricity \& Magnetism |  |
| Pre-Calculus Honors | Social Studies |  |
| AP Calculus (AB) | U. S. History I Honors |  |
| AP Calculus (BC) | AP World History |  |
| AP Statistics | AP European History |  |
|  | AP U. S. Government |  |
|  | AP U. S. History |  |

Incomplete: An "I" indicates work that is not complete. A student who fails to complete his work within two weeks following the close of a marking period will be regarded as having failed.

## Graduation Requirements

(continued)

## Withdrawn

If a student withdraws from a course prior to the end of the first half of the course, no entry will be made on the permanent record. If the student withdraws during the third marking period, a grade of "WP" will be given (if passing to date in the course) OR a "WF" will be given (if failing). Any withdrawal during the fourth marking period will result in a "WF" on the transcript. No credit will be received for withdrawn courses.

## Procedures for Course Selection

## Grade 9

Sometime after the first of the year, eighth graders will attend a scheduling meeting to determine courses for their 9th grade year. Since this will be the student's first experience in the selection of courses, individual conferences will be set up with the counselor. At that time, recommendations made by the student's current teachers will be reviewed. The student's academic background will also be reviewed, i.e., record to date, test results, and interests. From this discussion, a program of studies shall be determined.

## Grades 10, 11, and 12

These grade levels will also be involved in course selections, usually in February. This procedure, however, will differ somewhat from the ninth grade. Each upperclassman, through a group scheduling procedure, will meet with a counselor to formulate a tentative program.

Historically, Kittatinny Regional High School prepares approximately eighty-five percent or more of its students to attend college, both four-year and two-year. Students' schedules reflect this and are geared to gain acceptance into post-secondary education. State mandates, as well as our wide range of elective programs, all enter into the yearly determination of a student schedule.

Parents, of course, are encouraged to either call or personally visit the counselor to discuss the courses selected. After the completion of this process, the master schedule will be formed. Students are then scheduled by use of a computer and any changes are handled once tentative schedules are distributed.

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## Additional Enrichment Courses

| Course Name | Course <br> Number | Periods <br> per Week | Credits |
| :--- | :---: | :---: | :---: |
| College and Career Readiness | 8970 | 5 | 2.5 |

## 8970 College and Career Readiness

This half-year course is designed to provide students with test preparation skills, as well as twenty-first century college and career skills. The emphasis will be on language arts and math knowledge, skills, and test-knowledge, skills, and test-taking strategies for various standardized tests, as well as developing the practical skills necessary for the college application process and the job application process.

## Business

| Course Name | Course <br> Number | Periods <br> per Week | Credits |
| :--- | :---: | :---: | :---: |
| Introduction to Accounting | 8918 | 5 | 5 |
| Business Management | 8909 | 5 | 2.5 |
| Introduction to Computer Programming | 8920 | 5 | 2.5 |
| Introduction to Web Design | 8922 | 5 | 2.5 |
| AP Computer Science Principles | 8925 | 5 | 5.0 |
| AP Computer Science A | 8926 | 5 | 5.0 |
| Microsoft Excel | 8906 | 5 | 2.5 |
| Marketing | 8901 | 5 | 2.5 |
| Introduction to Business | 8903 | 5 | 2.5 |
| Entrepreneurship | 8912 | 5 | 5.0 |

## Business Courses

## 8918 Introduction to Accounting

Introduction to Accounting is a full year course designed to prepare students in grades $10-12$ to keep accurate and up-to-date records for business, to aid them in determining if this field of accounting is a wise career choice, and to enable them to manage their personal financial affairs. These are accomplished by studying basic accounting principles, journalizing, posting, preparing the financial statements, using special journal ledgers, and doing the end-of-the-month accounting activities. The course is designed for both the college-bound student who plans to major in accounting or business administration and for the office career student. Additionally, this course provides real-life information about the business world, including cultural diversity, ethics, global perspectives, and technology. Along with the above-mentioned concepts, students are challenged with Internet activities, cases for critical thinking, and applied communications. The last portion of this course builds upon the basic accounting principles learned earlier and involves an in-depth view of the entire accounting system. The Microsoft Excel, QuickBooks and generic accounting software systems will be utilized to assist students in preparing financial documents for analysis.

## 8909 Business Management

The field of sports and entertainment marketing, one of the largest industries in the United States, is rapidly growing with colleges and universities now offering concentrations and majors in a dynamic field. Students will learn and demonstrate the importance of the marketing mix, product development, research and career development to effectively achieve the desired goals.

Students will continue to learn, understand and appreciate the depth and breadth of the sports and entertainment industry while also addressing issues of ethics and broadening their

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## Business Courses

## (continued)

understanding of the diverse and changing demographics within this global industry. The basic business and marketing concepts taught within this curriculum will provide students with a foundation and knowledge that can be applied within any career path they may pursue. Students will learn that the fundamentals of successful marketing techniques to make effective decisions are universal and not specific to just this industry.

## 8920 Introduction to Computer Programming

## Prerequisite: Algebra I

This is designed as an introduction to the fundamentals of computer coding using the Python programming language. Students will develop critical thinking and problem-solving skills that are transferable to other disciplines by developing algorithms, and designing, writing, executing and debugging computer programs.

Topics include, but are not limited to input and output, variables, assignment statements, data types, conditional statements, Boolean logic, classes, objects, and arrays.

No previous programming experience is assumed, but the successful completion of the Algebra I course is required. Students will need access to a personal computer outside the school environment where the programming software may also be installed, and that meets the minimum requirements of the programming software.

## 8922 Introduction to Web Design

The Introduction to Web Design course is a project-based course that teaches students how to build their own web pages. Students will learn the languages HTML and CSS, and will create their own live homepages to serve as portfolios to demonstrate their knowledge. By the end of this course, students will be able to explain how web pages are developed and viewed on the Internet, analyze and fix errors in existing websites, and create their own multi-page websites.

No previous programming experience is assumed, but the successful completion of the Algebra I course is required. Students will need access to a personal computer outside the school environment where the programming software may also be installed, and that meets the minimum requirements of the programming software.

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## Business Courses

(continued)

## 8925 AP Computer Science Principles*

Prerequisite: Intro to Computer Programming.
According to College Board, the full-year AP Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. With a unique focus on creative problem solving and real-world applications, AP Computer Science Principles prepares students for college and career.

## 8926 AP Computer Science A

AP Computer Science A is equivalent to an introductory, college-level course for computer science majors, or those students who intend to major in other STEM disciplines that require an introduction to computer science. The course introduces students to fundamental computer science concepts such as analytic problem-solving, algorithm design strategies and methodologies, organization of data, data processing, object-orientation, and encapsulation. Students will develop and express their understanding of these concepts through the use of the Java programming language.

The AP Computer Science A course builds upon a foundation of mathematical reasoning that should be acquired before attempting such a course. As a prerequisite, students should have completed Algebra I and Geometry, and either the Intro to Computer Programming Course or the AP Computer Science Principles course. Outside the school environment, students will need access to a computing device that contains an up-to-date Google Chrome-based web browser, and access to the Internet.

## 8906 Microsoft Excel

In this half-year course, students will learn basic Excel functions and worksheet management techniques that are commonly used in daily life. Students will start by learning how to apply cell and text editing styles and settings. Students will become
familiar with and be able to use Excel's calculation tools, graphing tools, various copy/paste features and many of the tools in the Formula menu. Students will also be introduced to table construction, data analysis, data reporting, filtering, sorting, and other applications. Students completing this course will have a foundation in electronic spreadsheet uses in today's workplace.

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## Business Courses

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## 8901 Marketing

Students in this course are exposed to key concepts and learning experiences with social media marketing and are presented with foundational elements in areas such as social media for business, paid social media advertising, analytics and audits, digital marketing, and campaign planning. The textbook, class projects, in-class activities, and expert sessions position students to succeed in social media and digital marketing today and in their professions by providing them with practical, hands-on experiences. After receiving instruction on core social media marketing strategies and concepts, students will have the opportunity to build their own personal brands. They will learn what a personal brand is, how they can influence that brand, and the benefits of having a personal brand.

## 8903 Introduction to Business

Introduction to Business introduces the processes and activities involved in business. The course provides core content applicable to all aspects of business and encompasses the practical applications of management theory. Students will be introduced to the fundamental management functions including planning, organizing, leading and controlling from multiple perspectives. The course is designed with a skills based approach and focuses on communication, problem solving, teamwork, decision making, conflict resolution and critical analysis.

## 8912 Entrepreneurship (Starting Your Own Business)

This is a capstone course offered to seniors who have successfully completed all prerequisite business courses. Students will learn how to apply basic business principles in order to develop, open and run a successful small business. Students who successfully complete this course will graduate with a complete business plan that they can use to start their own business.

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English

| Course Name | Course Number | Periods per Week | Credits |
| :---: | :---: | :---: | :---: |
| College Prep |  |  |  |
| CP English I | 1301 | 5 | 5.0 |
| CP American Literature | 1302 | 5 | 5.0 |
| CP English Literature | 1303 | 5 | 5.0 |
| CP English 12 | 1305 | 5 | 5.0 |
|  |  |  |  |
| Advanced College Prep |  |  |  |
| ACP English I | 1311 | 5 | 5.0 |
| ACP American Literature | 1312 | 5 | 5.0 |
| ACP English Literature | 1313 | 5 | 5.0 |
|  |  |  |  |
| Honors/AP |  |  |  |
| English I Honors | 1321 | 5 | 5.0 |
| English II Honors | 1322 | 5 | 5.0 |
| AP English Language \& Composition | 1331 | 5 | 5.0 |
| AP English Literature \& Composition | 1332 | 5 | 5.0 |
|  |  |  |  |
| Academic Electives |  |  |  |
| Literary Themes and Analysis | 1314 | 5 | 5.0 |
| ACP Creative Writing | 1315 | 5 | 5.0 |
| ACP Journalism | 1316 | 5 | 5.0 |
| ACP World Literature | 1317 | 5 | 5.0 |
| ACP Psychological/Multicultural Themes in Literature | 1342 | 5 | 5.0 |
| Drama in Literature** | 1343 | 5 | 5.0 |

** Drama in Literature can be counted as an academic English elective or a Visual and Performing Arts class. It CANNOT be counted in both areas towards graduation.

## Note:

All students must take the basic foundation courses of English I, American Literature and English Literature.

Academic electives may be taken concurrently with these courses or during a student's senior year.

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## English Courses

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## 1301 English 1 (College Prep)

This course is designed for a student who needs additional instruction and practice in developing reading, writing, and communication skills. Additional focus is placed on preparing students to be successful on standardized tests. Areas of concentration center upon literal, inferential and applied skills of reading comprehension, interpreting, organizing and analyzing text, vocabulary acquisition, and distinguishing between various types of texts including narrative, informational and persuasive. Master the Writing Process which includes story writing, persuasive and text-based essay writing, revising and editing techniques, is emphasized along with skills such as speaking, listening and viewing for the purpose of strengthening understanding and improving communication skills. The literature varies, from Shakespeare to modern multicultural texts, with the inclusion of supportive informational readings as well.

## 1302 American Literature (College Prep)

This course is designed for a student who needs additional instruction and practice in developing reading, writing and communication skills. Additional focus is placed on preparing students to be successful on standardized tests. Areas of concentration center upon literal, inferential and applied skills of reading comprehension, interpreting, organizing and analyzing text, vocabulary acquisition, and distinguishing between various types of reading texts including narrative, informational and persuasive. Master the Writing Process which includes story writing, persuasive and text-based essay writing, revising and editing techniques, is emphasized along with skills such as speaking, listening, and viewing for the purpose of strengthening understanding and improving communication skills. American literature, 1500 through present day, is the focus with the inclusion of supportive informational texts.

## 1303 English Literature (College Prep)

This course is designed for a student who needs additional instruction and practice in developing reading, writing and communication skills. Additional focus is placed on preparing students to be successful on standardized tests. Areas of concentration center upon literal, inferential and applied skills of reading comprehension, interpreting, organizing and analyzing text, vocabulary acquisition, and distinguishing between various types of texts including narrative, informational and persuasive. Master the Writing Process which includes story writing, persuasive and text-based essay writing, revising and editing techniques, is emphasized along with skills such as speaking, listening and viewing for the purpose of strengthening understanding and improving communication skills. English literature is the focus with the inclusion of supportive informational texts.

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## English Courses

(continued)

## 1305 English 12 (College Prep)

This course is designed for a student who needs additional instruction and practice in developing reading, writing and communication skills. Areas of concentration center upon literal, inferential and applied skills of reading comprehension, interpreting, organizing and analyzing text, vocabulary acquisition, and distinguishing between various types of texts including narrative, informational and persuasive. Mastering the Writing Process, with emphasis on real-world assignments, is the focus of the class. World literature is the focus with the inclusion of supportive informational texts.

## 1311 English I (Advanced College Prep)

Serving as an introduction to high school English, this challenging curriculum offers the ninth grade college-bound student insight into various genres. Students focus on units in grammar, writing, informational texts, reading literature and drama, and research. There is an emphasis on the process approach to writing based on logical thinking and reasoning skills. Current technology will be used to enhance the students' skills in writing, research, and all forms of communication.

## 1312 American Literature (Advanced College Prep)

Designed for college-bound tenth grade students, this course provides a study of
recognized masterpieces of American Literature including a variety of genres representing many cultures of American heritage. It stresses reading comprehension for both literature and informational texts, vocabulary, writing, and verbal skill development. A special emphasis is placed upon continued preparation for standardized tests. Literary works are analyzed from the perspectives of social impact, the authors' attitudes, personal applications, varied interpretations, and literary significance. There is a continuous effort to have each student realize a personal relevance to the works studied.

## 1313 English Literature (Advanced College Prep)

Designed for college bound 11th grade students, the course provides a study of recognized masterpieces of English Literature. A variety of literary genres, representative historical events, and relevant artistic works are included in order to provide a comprehensive cultural perspective. The course stresses reading comprehension for both literature and informational texts, vocabulary, writing, and verbal skill development with a special emphasis on mastering reading and writing demands of standardized tests. Literary works are analyzed from the perspectives of social impact, personal applications and interpretations, authors' attitudes, literary significance, and thematic implications. Methodology and content are designed to foster appreciation for traditional literature of English heritage.

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# English Courses 

(continued)

## 1315 Creative Writing (Advanced College Prep)

This full-year course is designed for college-bound juniors and seniors who have shown special aptitude for creative writing. The course aims to increase sensory awareness and develop observation and interpretation skills. This class will foster a lifelong appreciation for technical and aesthetic beauty found in writing.

## 1316 Journalism (Advanced College Prep)

This is a non-fiction writing course designed to give students a foundation of writing factual information in a clear and concise manner. It is writing-intensive, instructing students in the basics of writing succinct prose. Students will learn how to develop clear, thought-provoking introductions, well organized, information-driven paragraphs, and distinct conclusions. They will learn to organize information into non-fiction based works, such as news, feature stories, editorials, reviews, and essays. Students will learn to gather facts, interview sources, and structure stories in a way that is easy to read. Once they understand the fundamentals of non-fiction writing, they will edit for grammar and content, which can be applied directly to standardized tests. Students will master grammar and use all parts of speech and parts of a sentence to enhance writing. Students will learn MLA style, which can be incorporated into research papers, and Associated Press style. This will be a full-year, college-preparatory course.

## 1317 World Literature (Advanced College Prep)

The Stockton University Dual Credit course in World Literature allows students to pursue world literature through the lens of genocide. The purpose of the course is to present historical evidence, literature, art, and music related to the culture that was lost, as well as to the event itself. In addition, the course will introduce students to the key concepts and questions related to the Holocaust and genocide. Students will examine various historiographical interpretations of the evidence and will understand that the Holocaust and other genocides do not happen to nameless individuals or faceless groups, as every aspect has a human element. Like all English classes, the course will aid students in developing the habit of critical reading, viewing, thinking, and writing.

## 1321 English I Honors

This course pushes ninth grade students to new levels of expectations and proficiency. The class is reading and writing intensive, stressing all aspects of literary analysis and all areas and styles of writing. Students will be asked to read and interpret texts from a variety of cultures. Students will be required to write essays, work on creative assignments and write a synthesis paper.

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## English Courses

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## 1322 English II Honors

English II H challenges sophomores to reach new levels of proficiency. The class is writing intensive and stresses all aspects of the written language, including creative writing, essay writing and synthesis writing. It allows students to explore literary texts and provide critical analysis and insight to these texts. Students will be asked to provide their interpretations of ideas and concepts relating to a wide array of texts from American and British literature.

## 1331 AP English Language and Composition

This course will give students multiple opportunities to work with the rhetorical situation, examining the authors' purposes, audiences, and subjects in texts. Students write in a variety of modes for a variety of audiences, developing a sense of personal style and ability to analyze and articulate how resources of language operate in any given text. They also study the rhetoric of visual media such as photographs, films, advertisements, comic strips, and music. The purpose of the course is to help students "write effectively and confidently in college courses across the curriculum and in professional and personal lives" (The College Board, AP English Course Description, May 2008).

## 1332 AP English Literature and Composition

By design and intent, this AP English course fosters in students the development of mature reading skills and superior abilities to write well about literary topics encountered while reading poetry, short stories, informational texts, and novels. The course work, therefore, is geared to senior students who wish to accept challenges of a class that provide demanding opportunities for intellectual growth. Emphasis is placed on the mastery of those skills that will lead to the critical and thorough reading of literary works of recognized merit. The course is also designed to encompass the development of superior writing skills, which reveal a student's thoughtful analysis of literary works.

## 1314 Literary Themes and Analysis (College Prep)

The Literary Themes and Analysis course will incorporate works that will entertain, teach a moral, convey meaning, or relate to aspects of the human condition. The themes will address ideas that are timeless and universal. Students will analyze plot, mood, point of view, figurative language, symbolism, irony, setting and how all of these elements affect character development. Students will also evaluate the author's presentation of the material, focusing on comparing writing styles. The course will enrich students through exposure to a variety of genres that are both classical and modern, which will feed their knowledge and connections to the world, as well as works of various time periods with which students may not otherwise be familiar. The course will also provide opportunities to strengthen ties between visual and linguistic intelligences. The students will be able to integrate skills learned in this course to many other classes. Finally, it

## Kittatinny Regional High School Curriculum Guide <br> Revised January, 2022

# English Courses 

(continued)
will meet students' needs because it addresses, in specific and unique ways, multiple intelligences.

## 1342 Psych/Multicultural Themes in Literature (Advanced College Prep)

Students will learn how cultural/societal differences affect their learning abilities and means for accepting suggested "norms" through in-depth analysis of works of literature by men and women from a variety of cultures. The relationship between what is read and taught, and opinions developed as a result of these teachings is an important aspect of education. Students need an opportunity to broaden learning through reading and analyzing divergent works. The course addresses many cultural issues: use of language, equality, and the past, present, and future of different cultures. Students will have an opportunity to read and analyze a variety of works to broaden their understanding of issues and literature and to work on comprehension skills. Response writing will help them to understand the readings, their opinions on readings, as well as improve their writing skills.

## 1343 Drama in Literature (College Prep)

The course will assist students in understanding literary elements as presented in dramatic mode. Throughout a student's high school career, the primary mode for the study of literature is either the novel, short story, essay, or other expository forms of writing. This course will permit students, who have been exposed to several plays in their earlier years, to select that medium for further study.

The course will teach students how a play's use of plot, theme, characterization, setting, tone, language, point of view, audience, and various interpretations reflect many facets of life. Additionally, through role playing and studying the acting process, the students will attain a better understanding of the process of theater and the functions of dramatic literature. Consequently, the students will be able to come to a greater appreciation of the culture and literary values of drama.

## Kittatinny Regional High School Curriculum Guide

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## Graduation Requirement Course

| Course Name | Course <br> Number | Periods <br> per Week | Credits |
| :--- | :---: | :---: | :---: |
| Personal Financial Management | 8915 | 5 | 2.5 |

## Financial Literacy Course

## 8915 Personal Financial Management

This course provides an overview of the consumer and his/her need to make informed personal financial decisions. Students will study the key concepts and tools that are necessary to help them manage their personal finances and help them avoid financial difficulties as they transition from school to their professional careers. Topics covered include budgeting, saving for financial emergencies and major purchases, investing for the future, retirement planning, selecting the appropriate investment instruments, use of insurance, and personal debt management. Other topics related to the current financial environment and their impact on personal financial management may be covered. Successful completion of this course is a NJ State mandated graduation requirement.

## Health, Physical Education and Drivers Education

The skills, knowledge and understanding associated with health and physical education are essential for human survival and basic to a productive and fulfilling life. This belief is echoed by the state of New Jersey and demonstrated clearly by the inclusion of health and physical education as critical components of the New Jersey Core Standards for all students in K through 12.

The curriculum is written based on a number of beliefs about the role and importance of health and physical education. Through this program of study, students will accumulate a body of knowledge about nutrition, practices for healthy living, the human body, family life, substance use and abuse, safety and physical fitness, as well as individual, team and lifetime activities. The program promotes healthy lifestyles and focuses on the development of the whole individual, including the physical, social and emotional well-being. It provides students with the information needed to live a healthy life.

The variety of activities in the program provides opportunities for students to recognize athletic interest and talent, develop self-discipline, and promote personal achievement and self-esteem through reaching physical goals and building confidence that results from healthy competition. The program stresses the importance of setting goals and provides students with leadership possibilities. The cooperative experiences and problem-solving situations develop social skills and refusal skills to help students confidently avoid peer pressure.

Students must change clothes to participate in most physical education classes. Dress code is shorts/sweatpants; T-shirts/sweat- shirts; socks and sneakers with ties. Not allowed are pajama bottoms, tank tops, sleeveless shirts, or clothing with snaps, zippers, or belt loops. Absolutely NO jewelry is allowed to be worn in physical education classes and this rule is strictly enforced.

## Goals

## ALL STUDENTS should:

- learn health promotion and disease prevention concepts and health-enhancing behaviors;
- learn health enhancing personal and life skills;
- learn the physical, mental, emotional, and social effects of the use and abuse of alcohol, tobacco, and other drugs;
- learn the biological, social, cultural, and psychological aspects of human sexuality and family life;
- learn and apply movement concepts and skills that foster participation in physical activities throughout life;
- learn and apply health-related fitness concepts;
- develop the skills and attitudes associated with sportsmanship and good citizenship;
- be able to resolve individual and group problem-solving challenges; and
- be able to recognize excellence in physical performance in themselves and others


## Kittatinny Regional High School Curriculum Guide

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# Health, Physical Education and Drivers Education (continued) 

## Units of Study

## Health Units - Grades 9-12

- Drug Education
- Human Growth and Development
- Human Sexuality - Social Problems
- Mental Health
- Interpersonal / Intrapersonal Relationships
- Abusive Relationships
- Nutrition
- Safety and First Aid
- Cardiopulmonary Resuscitation (CPR)
- Automated External Defibrillator (AED)


## Driver Education

- Driver Education Theory
- Behind the Wheel


## Personal Development/ Conditioning

- Walking / Jogging
- Aerobics - Tumbling - Weight Control
- Physical Fitness


## Aquatics

- Basic Rescue
- Water Safety
- Recreation Aquatics
- Water Sports
- Fitness Swimming and Water Aerobics


## Health, Physical Education and Drivers Education (continued)

## Outdoor Recreation

- Archery


## Team Sports

- Basketball
- Flag Football
- Floor Hockey
- Softball
- Speedball
- Ultimate Frisbee


## Physical Education Games

- Cooperative Games
- Alfonso Ball
- California Kickball
- Eclipse Ball
- Grab Hook
- Handball
- Pillo Polo
- Skyhook
- Wiffle Ball


## Net Games

- Badminton
- Pickleball
- Speedminton
- Table Tennis
- Tennis
- Volleyball


## Mathematics

| Course Name | Course Number | Periods per Week | Credits |
| :---: | :---: | :---: | :---: |
| College Prep |  |  |  |
| CP Algebra 1 | 1410 | 10 | 10.0 |
| CP Geometry 1 | 1412 | 5 | 5.0 |
| CP Algebra 1 | 1414 | 5 | 5.0 |
| Advanced College Prep |  |  |  |
| ACP Algebra I | 1411 | 5 | 5.0 |
| ACP Geometry I | 1413 | 5 | 5.0 |
| ACP Algebra II | 1415 | 5 | 5.0 |
| ACP Precalculus | 1416 | 5 | 5.0 |
|  |  |  |  |
| Honors/AP |  |  |  |
| Geometry Honors | 1421 | 5 | 5.0 |
| Algebra II Honors | 1422 | 5 | 5.0 |
| Pre-Calculus Honors | 1423 | 5 | 5.0 |
| Calculus Honors | 1430 | 5 | 5.0 |
| AP Statistics | 1432 | 5 | 5.0 |
| AP Calculus (AB) | 1433 | 5 | 5.0 |
| AP Calculus (BC) | 1434 | 5 | 5.0 |
|  |  |  |  |
| Academic Electives |  |  |  |
| ACP Statistics | 1419 | 5 | 5.0 |
| Discrete Math (CP) | 1417 | 5 | 5.0 |

## Note:

All students must take the basic foundation courses of Algebra, Geometry, and Algebra II. Academic electives may be taken concurrently during a student's sophomore, junior or senior year, pending prerequisites.

## Math Courses

## 1410 Algebra I (College Prep)

CP Algebra I is a standard college preparation course designed for students who plan to pursue a four-year college degree. The course aligns to the Common Core standards and exposes students to a rigorous curriculum. This course provides a development of algebraic skills and concepts necessary for students to be prepared for the challenges of Algebra II, Geometry and college level mathematics. In particular, the instructional program in the course provides for the use of algebraic skills in problem-solving situations. The double period allows for multi-dimensional delivery of instruction and students will complete most of their independent practice under the guidance of highly qualified instructors during the class period. Topics include: Foundations for Algebra; Solving Equations and Inequalities; Linear, Quadratic and Exponential Functions; Systems of Equations and Inequalities; Radical Expressions and Equations; Rational Expressions and Functions; Data Analysis and Probability.

## Math Courses

(Continued)

## 1411 Algebra I (Advanced College Prep)

ACP Algebra I is a rigorous college prep course designed for those students who plan to attend a four-year college and major in a STEM related field. The course aligns to the Common Core standards while providing in depth studies of various algebraic concepts, applications of these concepts in science, technology and engineering, and an analysis of concept extensions. Concepts are analyzed in great depth with an emphasis on abstract thought, reasoning and modeling extensions. Topics include: Foundations for Algebra; Solving Equations and Inequalities; Linear, Quadratic and Exponential Functions; Systems of Equations and Inequalities; Radical Expressions and Equations; Rational Expressions and Functions; Data Analysis and Probability.

## 1412 Geometry I (College Prep)

CP Geometry is a standard college preparation course designed for students who plan to pursue a four-year college degree. The course aligns to the Common Core standards and exposes students to a rigorous curriculum, thereby preparing them for the challenges of Algebra II and college level mathematics. Students study geometry concepts and properties by emphasizing hands-on activities. Topics include: Tools of Geometry; Constructions; Transformations; Parallel and Perpendicular Lines; Congruent Triangles; Reasoning and Proof; Relationships within Triangles; Quadrilaterals and Other Polygons; Similar Polygons; Right Triangles and Trigonometry; Circles; Circumference, Perimeter, Area and Volume.

## 1413 Geometry I (Advanced College Prep)

ACP Geometry is a rigorous college prep course designed for those students who plan
to attend a four-year college and major in a STEM related field. The course aligns to the Common Core standards while providing in depth studies of various geometric concepts, applications of these concepts in science, technology and engineering, and an analysis of concept extensions. In addition, algebraic concepts are incorporated into a variety of geometric topics, thereby creating a continuum of interconnectivity among a variety of mathematical studies. Topics include: Tools of Geometry; Constructions; Transformations; Parallel and Perpendicular Lines; Congruent Triangles; Reasoning and Proof; Relationships within Triangles; Quadrilaterals and Other Polygons; Similar Polygons; Right Triangles and Trigonometry; Circles; Circumference, Perimeter, Area and Volume; Probability

## 1414 Algebra II (College Prep)

CP Algebra II is a standard college preparation course designed for students who plan to pursue a four-year college degree. The course aligns to the Common Core standards and exposes students to a rigorous curriculum, thereby preparing them for the challenges of college level mathematics. Topics include: Topics include: Equations, Inequalities and their Graphs; Linear, Quadratic, Exponential, and Logarithmic Functions; Systems of Equations and Inequalities; Polynomial Equations and Functions; Radical Expressions, Equations and Functions; Rational Expressions, Equations and Functions; Data Analysis and Probability. A graphing calculator is required for this course.

## Math Courses

(Continued)

## 1415 Algebra II (Advanced College Prep)

ACP Algebra II is a rigorous college prep course designed for those students who plan to attend a four-year college and major in a STEM related field. The course aligns to the

Common Core standards while extending and building upon the studies of various algebraic concepts and applications that were introduced in Algebra I. There continues to be in depth analysis of the applications of these concepts in science, technology and engineering. Topics include: Equations, Inequalities and their Graphs; Linear, Quadratic, Exponential, and Logarithmic Functions; Systems of Equations and Inequalities; Polynomial Equations and Functions; Radical Expressions, Equations and Functions; Rational Expressions, Equations and Functions; Trigonometric Functions; Data Analysis and Probability. A graphing calculator is required for this course.

## 1416 Pre-Calculus (Advanced College Prep)

This is a course for those students who have successfully completed Algebra II. Trigonometric functions, graphs, inverses, equations, applications, identities, polynomial functions, exponential and logarithmic functions, conic sections, sequences and series, polar coordinates, and an introduction to limits and calculus are presented with practical implications using the latest in technology. Technology and real-world applications drive the course.

## 1417 Discrete Math (College Prep)

This course is designed for those students who have met the prerequisite of Algebra 2 and wish to attend a 4-year college. It provides a review of the fundamentals of a variety of mathematical topics in addition to an introduction of new mathematical concepts. There will be an emphasis on an assortment of real-world examples and applications.

## 1419 Statistics (Advanced College Prep)

Statistics is the science of collecting and analyzing data and is a required course for many college majors. Many decisions in life must be made from incomplete information. Statistics provides methods for making reliable conclusions when faced with uncertainties. The course begins with data analysis, and then progresses into how to sample and experiment properly. The students explore probability and use laws of probability to draw conclusions about a population from sample data using inference methods. A graphing calculator is required for this course.

## 1421 Geometry Honors

This class is a rigorous, fast paced course designed to introduce students to concepts that will be used extensively in pre-calculus honors. Students will develop strong special sense and will learn how to apply geometric properties.

## Math Courses

## (Continued)

## 1422 Algebra II Honors

This course is a rigorous, fast paced course designed to introduce students to concepts that will be used extensively in Pre-Calculus Honors. Students will develop strong special sense and will learn how to apply advanced geometric properties.

## 1423 Pre-Calculus Honors

This course is designed to develop building blocks to Advanced Placement Calculus. The concepts explored are used to model and analyze natural phenomena. It is an in depth study of advanced algebra, analytic geometry, limit theory, continuity, and series. The derivative, its purpose and application is studied as a segue into AP Calculus.

## 1430 Calculus Honors

Calculus consists of a full academic year of work in calculus and related topics. One semester of college calculus credit can be earned. Course topics include a brief review of polynomials, trigonometric, exponential, and logarithmic functions, followed by limits and continuity, derivatives, integrals
and applications of differential and integral calculus to real-world problems. This course is designed for use in a beginning calculus course for students in business, management, economics, and the social and life sciences. Many of the same topics as AP Calculus are covered without the fast pace required of the Advanced Placement exam schedule.

## 1432 AP Statistics

Statistics is the science of collecting and analyzing data and is a required course for many college majors. Many decisions in life must be made from incomplete information. Statistics provides methods for making reliable conclusions when faced with uncertainties. The Advanced Placement Statistics course begins with data analysis, and progresses into how to sample and experiment properly. The students explore probability and use the laws of probability to draw conclusions about a population from sample data using confidence intervals and hypothesis testing. The students will be expected to take the College Board Advanced Placement Statistics Exam in May. A graphing calculator is required for this course.

## 1433 AP Calculus (AB)

Prerequisite: Honors Pre-Calculus. This is essentially a first-year, college-level study of calculus. The Advanced Placement - AB level - syllabus will be followed. Both integral and differential calculus will be studied with emphasis on physical applications. Advanced functions and advanced techniques of integration will be covered if time permits. Students will be expected to take the College Board Advanced Placement Calculus exam in May. This course is open to those seniors who have successfully completed Pre-Calculus or Pre-Calculus Honors and have been recommended by their teacher.

## Math Courses

(Continued)

## 1434 AP Calculus (BC)

Prerequisite: Honors Pre-Calculus
This is a full-year college-level calculus course designed to meet the Advanced Placement curricular requirements for Calculus BC (equivalent to two semesters of college calculus). The major topics of this course are limits, derivatives, integrals, the Fundamental Theorem of Calculus, and series. We will investigate and analyze course topics using equations, graphs, tables and words, with a particular emphasis on a conceptual understanding of calculus. Applications, in particular to solid geometry and physics, will be studied where appropriate.

## Music

| Course Name | Course <br> Number | Periods <br> per Week | Credits |
| :--- | :---: | :---: | :---: |
| Concert Band | 1111 | 5 | 5.0 |
| Concert Choir | 1113 | 5 | 5.0 |
| Wind Symphony | 1117 | 5 | 5.0 |
| Select Choir | 1119 | 5 | 5.0 |
| Introduction to Music Theory | 1115 | 5 | 5.0 |
| AP Music Theory | 1126 | 5 | 5.0 |

## Music Courses

## 1111 Concert Band

Concert Band is an elective course composed of students who have prior instrumental experience. Participation in the bi-weekly rotating lesson program is required of all students electing this course. A good instrumental balance within the band also may dictate the numbers admitted for each instrument.

## 1113 Concert Choir

The purpose of this course is to enrich the quality of life through singing and to train students in proper ensemble techniques, to improve their individual vocal performance technique, and to increase understanding and appreciation of the choral art while aiming for high standards of musical performance.

## 1115 Introduction to Music Theory

Prerequisite: Students must be able to read music and have approval of the instructor. The purpose of this course is to develop students' under-standing of music's symbol system (notation) and to gain knowledge of the basic principles of tonal music. Students will learn to translate symbols into sound and sound into symbols, increasing their ability to listen to music and read music with an understanding of how, what, and why basic elements are being used.

## 1117 Wind Symphony

Wind Symphony is an advanced elective course composed of students who have prior instrumental experience. It is an auditioned ensemble. Participation in the bi-weekly rotating lesson program is required of all students electing this course. A good instrumental balance within the band also may dictate the numbers admitted for each instrument.

## 1119 Select Choir

The purpose of this course is to enrich the quality of life through singing and to train students in proper ensemble techniques, to improve their individual vocal performance technique, and to increase understanding and appreciation of the choral art while aiming for high standards of musical performance. An audition is required for this course. A balanced group will dictate the number of students admitted.

## Music

(Continued)

## 1126 AP Music Theory

Prerequisite: Introduction to Music Theory.
The purpose of this course is to continue to develop students' understanding of theory and explore more advanced elements of tonal music. The students will learn to translate symbol into sound and sound into symbol, increasing their ability to listen to music and read music with an understanding of how, what, and why basic elements are being used. Students will further develop their critical listening skills, as well as their singing skills in preparation for taking the AP test in May.

## Science

| Course Name | Course Number | Periods per Week | Credits |
| :---: | :---: | :---: | :---: |
| Fundamentals |  |  |  |
| Life Science | 1502 | 5 | 5.0 |
| Chemistry in the Community | 1503 | 5 | 5.0 |
| Science Exploration-Forensic Applications | 1504 | 5 | 5.0 |
|  |  |  |  |
| College Prep |  |  |  |
| CP Biology | 1511 | 6 | 6.0 |
| CP Chemistry | 1513 | 6 | 6.0 |
| CP Physics I | 1515 | 6 | 6.0 |
|  |  |  |  |
| Advanced College Prep |  |  |  |
| ACP Biology I | 1512 | 6 | 6.0 |
| ACP Chemistry I | 1514 | 6 | 6.0 |
| ACP Physics I | 1516 | 6 | 6.0 |
|  |  |  |  |
| Honors/AP |  |  |  |
| Forensics Honors | 1520 | 6 | 6.0 |
| Biology I Honors | 1521 | 6 | 6.0 |
| Chemistry I Honors | 1522 | 6 | 6.0 |
| Anatomy and Physiology Honors | 1523 | 6 | 6.0 |
| AP Physics I | 1524 | 6 | 6.0 |
| AP Physics C Mechanics | 1527 | 6 | 6.0 |
| AP Physics II | 1526 | 6 | 6.0 |
| AP Chemistry II | 1531 | 6 | 6.0 |
| AP Physics C Electricity \& Magnetism | 1528 | 6 | 6.0 |
|  |  |  |  |
| Academic Electives |  |  |  |
| ACP Environmental Science | 1532 | 6 | 6.0 |

## Note:

All students must take the basic foundation courses of Biology, Chemistry and Physics. Academic electives may be taken concurrently during a student's junior or senior year, pending prerequisites.

## Science Courses

## 1502 Life Science (Fundamentals)

The course is the investigation of living things and their interrelationships to each other, including man. It includes laboratory exercises, class discussion and outside reading. Problem solving and critical thinking are stressed.

## Science Courses

(continued)

## 1503 Chemistry in the Community (Fundamentals)

Emphasis is placed on the influence of chemistry in our daily lives. The course is for those who are planning careers not related to science. Topics such as resources, petroleum, food, water, air and climate, chemical industry, and chemistry relative to health will be covered. Students will develop skills that enable them to become critical, scientific thinkers while living in the environment. Topics align with New Generation Science Standards (NGSS). Students are encouraged to look differently at the world, develop skills in the appropriate use of technology, and sound evidence gathering skills, which support critical thinking and decision making for themselves and the communities in which they belong.

## 1504 Science Exploration- Forensic Applications (Fundamentals)

This course will familiarize students with a variety of scientific concepts and constructs related to everyday lives. Topics from physical science, life science, earth science, and environmental science will be included. Through observation, lab skills, analysis of data, study of historical content, and engineering design, students will develop a better understanding of the world. Connections to life applications will be an integral focus.

## 1511 Biology (College Prep)

This course is the investigation of living things and their interrelationships to each other, including man. It includes laboratory exercises, class discussion and outside reading. Problem solving and critical thinking are stressed.

## 1512 Biology I (Advanced College Prep)

This course is the investigation of living things and their inter-relationships to each other, including man. Independent work and inquiry are integral components of this program. It includes laboratory exercises, class discussion and outside reading. Problem solving and critical thinking are stressed.

## 1513 Chemistry I (College Prep)

This course has been designed to provide students with a thorough background in the basic principles of Chemistry with a decrease of emphasis on math. An emphasis on learning is focused on student development of problem- solving skills and techniques rather than on the memorization of facts. This will prepare students for college chemistry and other college prep high school science courses.

## 1514 Chemistry I (Advanced College Prep)

This course has been designed to provide students with a thorough background in basic principles of Chemistry. The emphasis on learning is focused on student development of problem-solving skills and techniques rather than memorization of facts. The course will prepare students for college chemistry and other college prep high school science courses.

# Science Courses 

(continued)

## 1515 Physics I (College Prep)

Prerequisite: Algebra II CP. The objective of this course is to present a comprehensive survey in Conceptual Physics. Through its design, this will help students to develop strong and widely applicable thinking skills and problem-solving strategies.

## 1516 ACP Physics I (Advanced College Prep)

The objective of this course is to present a comprehensive survey in general Physics. This course will serve as a strong precursor to a first-year college level course, and it is designed to prepare students for such. Through its design, this course will help students to develop strong and widely applicable thinking skills and problem-solving strategies. Co-requisite Algebra II.

## 1518 ACP Environmental Science

Advanced College Prep Environmental Science draws from content in the Earth and Space Sciences, Physical Sciences, Life Sciences and Social Sciences. Prerequisites include Biology or Life Science and although not required, Chemistry and Statistics are recommended as co-requisites. Studies include explorations of the biotic and abiotic realms of our natural world as well as the physical, chemical and biological processes that regulate and sustain them. Students will become increasingly aware of the main feature of planet earth which distinguishes it from other planets in our solar system - life. Earth's unique status as a life-evolving and life-sustaining biosphere is partially derived from its unique position in the solar system and its relative proximity to our sun. The concept of sustainability forms a non-negotiable measuring stick for how our species measures progress and consequently serves as an essential element of the course content. That human society should be constructed so as to endure indefinitely without degrading the various systems or levels of biodiversity is a critical notion. Luckily, nature has provided us with a model of what sustainability can look like in the ecosystem concept. Much of the content and activity in environmental science will pursue a broader and deeper understanding of how various ecosystems are structured and how they function. In the ever continuing and ever expanding pursuit of energy, food, water resources and material well-being for Earth's human inhabitants, we have increasingly alienated ourselves from natural rhythms, patterns and cycles that have sustained life on earth for billions of years. Restoring our rightful place in the biosphere will require recognition that there are natural limits that cannot be long ignored without our continuing to endanger this balance. The ecological footprint concept is a useful tool in this regard. Ultimately, this course acquaints students with the consequences of their actions and how they can reduce their impact on the planet. The maxim "Think Globally, Act Locally" may lead them to further explore how our collective and organized actions can be a powerful and restorative agent of change for our biosphere and its biodiversity.

## Science Courses

(continued)

## 1520 Forensics Honors

Prerequisites: Biology I and Chemistry I, Teacher recommendation
Forensics is an integrated science course offering students an opportunity to apply core concepts from their high school physics, chemistry and biology courses in a variety of areas that fall within the arena of Forensic Science. The course will consist of lectures, case studies, labs and individual research projects in the areas of crime scene processing, trace evidence, blood chemistry and spatter patterns, fingerprints, tool marks, forensic DNA technology, questioned documents, psychological profiling and forensic anthropology. (Syracuse Concurrent Course)

## 1521 Biology I Honors

This course explores both diversity and unity of living matter. At the same time, students will be involved in discussions \& laboratory science inquiry. The way all knowledge has been obtained (scientific method) is important as a whole to the society and as a way to experience critical thinking skills in a personal way. Several unifying themes are predominant:

- How science derives information
- How science classifies information
- Relationship of living things to physiochemical conditions required for life and the need for homeostasis
- Delicate relationship of living matter and abiotic para- meters necessary for sustaining life
- Genetic continuity of information important to living things - passed from generation to generation
- Science and society, which relates principles of science to the problems faced by our culture and its future is critical.


## 1522 Chemistry I Honors

This will provide students with a thorough and detailed back- ground in major principles of chemistry. Emphasis on learning is focused on student development of problem-solving skills \& techniques, rather than memorization of facts. This is designed to elicit higher level learning behaviors \& challenge the abilities of students who show an interest and aptitude in science. This course is eligible for concurrent credit and it provides an excellent foundation for college chemistry.

## 1523 Anatomy and Physiology Honors

This course builds on foundations established in Biology I and/or Biology I Honors. The course is separated into two sections, Molecular Biology and Anatomy \& Physiology. Molecular Biology begins with a deeper investigation into basic chemical concepts including biochemical families and chemistry of living systems. This introductory investigation solidifies fundamental concepts

## Science Courses

(continued)

of molecular biology and culminates in a detailed investigation of the metabolic utilization of organic molecules. Anatomy \& Physiology transitions the course to an investigation of the human body. Beginning with a basic introduction to anatomy and physiology and proceeding through muscular/neurological anatomy and physiology, this course will provide insights and understanding of the inner workings of a human body. Anatomy \& Physiology is eligible for concurrent course credit at SCCC.

## 1524 AP Physics I

Prerequisite: Algebra II. This is an algebra-based equivalent of a first semester of introductory, algebra-based college physics. Curriculum is dictated by College Board standards/guidelines. The College Board has developed the standards as a result of
collaboration between AP teachers and college faculty. This will explore topics, such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves/sound; and introductory, simple circuits. With inquiry-based learning, students will develop in-depth knowledge of Newtonian physics and critical thinking and reasoning skills. They will learn through lecture, guided inquiry and lab-based lessons. A large focus will be experiential learning. Students will be required, on a regular basis, to design lab experiments or physical systems to meet set goals and objectives. Students will be required to explain these experiences and systems using Newtonian based physics and constructs. The course is eligible for concurrent credit.

## 1527 AP Physics C: Mechanics

This is a calculus-based course designed to mirror an introductory mechanics course at the collegiate level. The course will meet six periods per week. Topics covered will include vectors, kinematics, dynamics, circular motion, angular motion, energy, momentum, and simple harmonic motion. Students will develop a strong conceptual and analytical understanding of Newtonian Mechanics and apply a wide variety of problem solving strategies and lab-based skills to reinforce this understanding. Lecture, discussion, guided-inquiry, and open-inquiry will be used both in the classroom and in the lab. Emphasis will also be placed on communicating an understanding of physics orally and in writing to both the instructor and peers. Laboratory activities will require students to use critical thinking and analysis skills to design, develop, test, and analyze mechanics concepts and constructs. Students taking this course are preparing for the AP Physics C: Mechanics exam administered in May. This is a second-year physics course. Students taking this course must have successfully taken AP Physics 1 or ACP Physics. Students must also be concurrently enrolled in calculus.

## 1526 AP Physics II

Prerequisite: AP Physics I. The AP Physics II course is an algebra-based equivalent of the second semester of introductory, algebra-based college physics. The curriculum is dictated by

## Science Courses <br> (continued)

the College Board standards and guidelines. The College Board has developed these standards as a result of collaboration between AP teachers and college faculty.

The AP Physics II course explores topics such as fluid static and dynamics; thermodynamics with kinetic energy; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electro-magnetism; physical and geometric optics; and quantum, atomic and nuclear physics. Through inquiry-based learning, the students will develop in-depth knowledge of Newtonian physics and critical thinking and reasoning skills.

Students will learn through lecture, guided inquiry and laboratory based lessons. A large focus will be experiential learning. Students will be required, on a regular basis, to design laboratory experiments or physical systems in order to meet set goals and objectives. Students will be required to explain these experiences and systems using AP Physics II based content. The course is eligible for concurrent credits.

## 1531 AP Chemistry II

Prerequisite: Algebra I. AP Chemistry is a course that parallels the material covered during two semesters of entry- level college chemistry courses. Successful completion of this course and the AP Chemistry Exam given in May qualifies students for the possibility of earning college hour credits for General Chemistry I and II lecture courses that are offered at some universities. The students should check with prospective universities as to their policy regarding AP courses and earning college credits.

Just as college level courses have a strong quantitative component, AP Chemistry will also emphasize numeric chemical calculations. The students will be assigned a problem set at every chapter. On occasion, the students will be required to present a solution to one of the assigned problems. The student must explain the steps he or she used to derive the answer.

Students will learn through lecture, guided inquiry and laboratory-based lessons. A large focus of the course will be experiential learning. Students will be required, on a regular basis, to design laboratory experiments or physical systems in order to meet set goals and objectives. The course is eligible for concurrent credits.

## 1528 AP Physics C: Electricity and Magnetism

AP Physics C: Electricity and Magnetism is a calculus-based physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as electrostatics, conductors, capacitors, and dielectrics, electric circuits, magnetic fields, and electromagnetism. Introductory differential and integral calculus is used throughout the course. (© 2020 College Board)

Students enrolled in AP Physics C: Electricity and Magnetism must have passed AP Physics 1 with an A or B average and should have taken or be concurrently enrolled in calculus.

## 1532 ACP Environmental Science

The purpose of this lab course is to understand the complex and changing relationship between humans, non-human species and the biosphere. Multidisciplinary by nature, Environmental Science draws from content in the Earth and Space Sciences, Physical Sciences, Life Sciences and Social Sciences. Studies begin with a concept that's easy to understand but extremely difficult for Homo sapiens to attain - a sustainable society. That human society should be constructed so as to endure indefinitely without degrading the various systems or levels of biodiversity is a critical notion. Luckily, nature has provided us with a model of what sustainability can look like in the ecosystem concept. Much of the content and activity in environmental science will pursue a broader and deeper understanding of how various ecosystems are structured and how they function. Students will become increasingly aware of the main feature of planet earth, which distinguishes it from other planets in our solar system life. The knowledge and preservation of earth's biodiversity may be the ultimate metric of how sustainable our collective actions are. In pursuit of energy, food, water resources and material well-being, we alienated ourselves from natural rhythms, patterns and cycles that have sustained life on earth for billions of years. Restoring our rightful place in the biosphere will require recognition that there are natural limits that cannot be long ignored without our continuing to endanger this balance. The ecological footprint concept is a useful tool in this regard. Ultimately, this course acquaints students with the consequences of their actions and how they can reduce their impact on the planet. Finally, it is assumed that students will sit for the AP Environmental Science Exam in May, which will be administered by the in-house, unaffiliated, certified staff and scored by The AP College Board. This course is eligible for concurrent credits.

## Social Studies

| Course Name | Course Number | Periods per Week | Credits |
| :---: | :---: | :---: | :---: |
| College Prep |  |  |  |
| CP World History | 1601 | 5 | 5.0 |
| CP United States History I | 1602 | 5 | 5.0 |
| CP United States History II | 1603 | 5 | 5.0 |
|  |  |  |  |
| Advanced College Prep |  |  |  |
| ACP World History | 1611 | 5 | 5.0 |
| ACP United States History I | 1612 | 5 | 5.0 |
| ACP United States History II | 1613 | 5 | 5.0 |
|  |  |  |  |
| Honors/AP |  |  |  |
| AP World History | 1621 | 5 | 5.0 |
| United States History I Honors | 1622 | 5 | 5.0 |
| AP United States History | 1631 | 5 | 5.0 |
| AP United States Government | 1632 | 5 | 5.0 |
| AP European History | 1633 | 5 | 5.0 |
|  |  |  |  |
| Academic Electives |  |  |  |
| CP Current Issues | 1641 | 5 | 5.0 |
| ACP Anthropology | 1642 | 5 | 5.0 |
| ACP Sociology | 1643 | 5 | 5.0 |

## Note:

All students must take the basic foundation courses of United States History and World History. Academic electives may be taken concurrently during junior or senior year.

## 1601 World History (College Prep)

This is an introductory high school social studies course and a continuation of the portion of world history presented in elementary and junior high social studies. The historical time period covered will begin at the end of the Renaissance and continue through World War I to the seeds of World War II. The course will also emphasize research, writing, reading, and critical thinking skills. Students will learn quiz and test preparation and will be taught class preparation and organizational techniques.

## 1602 United States History I (College Prep)

The primary purpose of United States History 1 is to gain an understanding of the knowledge, skills, and attitudes that will enable students to become effective citizens who are capable of participating in a democratic society. Reading, writing, map reading, research, and study skills are stressed to improve the overall academic abilities of the students.

## Social Studies Courses

(continued)

## 1603 United States History II (College Prep)

The primary purpose of United States History 2 is to gain an understanding of the knowledge, skills, and attitudes that will enable students to become effective citizens who are capable of participating in a democratic society. It is intended for juniors who possess reading and writing abilities that are commensurate with their grade.

## 1611 World History (Advanced College Prep)

This course is an introduction to high school social studies and a continuation of the portion of World History presented in elementary and junior high social studies. The historical time period covered will begin at the end of the Dark Ages and continue through World War I. This course emphasizes research, writing, reading, and critical thinking skills. The students will improve quiz/test preparation and completion skills. Students will also be taught class preparation and organizational techniques.

## 1612 United States History I (Advanced College Prep)

This course covers Colonial America through the end of the Civil War. The primary purpose of this course is to gain an understanding of the knowledge, skills, and attitudes that will enable students to become effective citizens who are capable of participating in a democratic society. Reading, writing, map reading, research, and study skills are stressed to improve the overall academic abilities of the students.

## 1613 United States History II (Advanced College Prep)

This course begins with Reconstruction. The primary purpose of United States history is to gain an understanding of the knowledge, skills, and attitudes that will enable students to become effective citizens, who are capable of participating in a democratic society. This is intended for juniors who possess reading and writing abilities that are commensurate with their grade.

## 1621 AP World History

In AP World History, students investigate significant events, individuals, developments, and processes from 1200 CE to the present. Students analyze primary and secondary sources, make historical comparisons, utilize reasoning about contextualization, causation, and continuity and change over time, and develop historical arguments. Students will explore the interactions between humans and the environment, the development and interaction of cultures, state building, expansion, conflict, creation, interaction of economic systems, and development and transformation of social structures. (College Board, AP World History Course, November 2018)

## Social Studies Courses

(continued)

## 1622 United States History I Honors

The primary purpose of studying United States History is to gain an understanding of the knowledge, skills, and attitudes that will enable students to become effective citizens capable of participating in a democratic society. The course is offered to sophomores who possess reading and writing abilities appropriate to their grade and level. This course prepares students for an AP level work and covers the Colonial period through the Civil War.

## 1631 AP United States History

The primary purpose of AP United States History is to gain an understanding of the knowledge, skills, and attitudes that will enable students to become effective citizens, who are capable of participating in a democratic society. This course covers Reconstruction through the Clinton administration. This honors course is offered to students who are sufficiently advanced to earn college credit for their work in high school. Students are expected to take the Advanced Placement examination in United States History.

## 1632 AP United States Government and Politics

The primary purpose of Advanced Placement United States Government and Politics is to gain an understanding of the knowledge, skills, and attitudes that enable students to become effective citizens capable of participating in a democratic society. The AP course is offered to students who are sufficiently advanced to earn college credit for their work. Students are expected to take the AP exam in May.

## 1633 AP European History

In addition to providing a basic exposure to the factual narrative, the goals of the AP European History course are to develop: (1) an understanding of the principal themes in modern European history (2) the ability to analyze historical evidence, and (3) the ability to express that understanding and analysis effectively in writing.

## 1641 Current Issues (College Prep)

Current Issues in America is an elective for seniors who wish to learn more about current problems facing society. The content changes annually as a result.

## 1642 Anthropology (Advanced College Prep)

This course represents a basic introduction to Anthropology including the origins, development, and nature of humans and their culture(s). It exposes students to perspectives, methods and materials of the field through its four major sub-field concentrations: Physical Anthropology, Archaeology, Anthropological Linguists, and Social Anthropology. The primary focus of the course is the physical and cultural nature of human beings.

## Social Studies Courses

(continued)

## 1643 Sociology (Advanced College Prep)

This elective for seniors acquaints students with fundamental terminology, concepts and methods of sociologists. Students will gain an understanding of the ingredients that comprise culture and the role of various demographic factors, which contribute to those cultures and the sociological implications. Also, students will realize specific aspects of socialization and particular roles of social structures. Students will apply social scientific methods used to examine relationships in and among groups. The students will examine specific effects of culture and society and how they influence diverse groups. They conclude by probing current issues of contemporary American society and culture, with a focus on social classes, social problems and major social institutions.

## Special Education

The Kittatinny Regional School District Board of Education has approved curriculum for the district's multiple disabilities, learning/language disabilities and resource center programs of study. Students are expected to meet the goals and objectives outlined in their Individual Educational Plans as they address proficiencies within the established courses of study. Unless the Child Study Team has approved modified objectives or an alteration in course content in the IEP, students must meet course objectives. Specific course choices for scheduling will be discussed at IEP review meetings.

## Models

## Our Inclusion Model:

In an in-class resource program, the student shall be provided modifications to the instructional strategies, testing procedures or other specialized instruction to access the general college preparatory education curriculum in accordance with the student's IEP. The in-class resource program is provided in the general education class. In-class resource is provided via a team teaching approach from the general and special education teachers.

## Our Pull-Out Replacement Model:

In a pull-out replacement resource program, the general college preparatory education curriculum and the instructional strategies may be modified based on the student's IEP. The resource program teacher shall have primary instructional responsibility for the student in the replacement resource program and shall consult with the general classroom teacher as appropriate.

## Our Multiply Disabled Model:

A special class program shall serve the students who have similar intensive educational, behavioral and other needs related to their disabilities in accordance with their individualized education programs. Placement in a special class program shall occur when the IEP team determines that the nature and severity of the student's disability is such that no other school-based program will meet the needs of the student. Special class programs shall offer instruction in the core curriculum content standards unless the IEP specifies a modified curriculum.

Our LLD Model:
The LLD program targets the needs of students with learning disabilities who require intensive instruction in an atmosphere that offers small group and individualized instruction with a classroom teacher and at least one instructional paraprofessional. Students are provided instruction in areas such as language arts, history, science, mathematics, job and occupational training, study skills and adaptive physical education.

## Special Education

(continued)

The Kittatinny Regional School District offers a full range of educational programs and services for students from grades seven through twelve. Kittatinny receives students from four elementary districts: Fredon, Hampton, Sandyston-Walpack, and Stillwater.

Parents or guardians of Kittatinny students may refer children who are experiencing significant learning difficulties to the Intervention and Referral Services Committee (I\&RS Committee) or the Child Study Team. Children who demonstrate sensory, emotional, communication, cognitive, or social difficulties may be found eligible for special education and related services. For younger children, parents can contact their elementary district Child Study Team for further information. Babies from birth to age three who are thought to have a developmental delay may receive assistance from the Early Intervention Program.

The I\&RS Committee is comprised of general and special education teachers, guidance counselors, the school nurse, and other professionals as needed. They provide support, intervention, accommodations and modifications to students in the general education setting. Student progress is followed as modifications are implemented. Records and data are kept to make sure that interventions are successful. If more intensive interventions are found necessary to promote student success, a referral to the Child Study Team can be made.

Following a Child Study Team referral, an evaluation might be undertaken. This evaluation may include an assessment of the student's social, emotional and academic status. Medical or other specialized evaluations may be included at no cost to the family. If the student is found eligible to receive special education and related services, an Individualized Education Program (IEP) is developed which includes a rationale for the student's educational placement and this is the basis for the program implementation.

Fredon
(973) 383-4151

Hampton
(973) 383-2714

Sandyston-Walpack (973) 948-4450

Stillwater (973) 383-6171
Babies from birth to three years old can receive assistance through the State of New Jersey at Early Intervention: 1-880-653-4463.

Parents of children with special needs, ages birth to 22 years, can receive information about available resources at Sussex County Special Child Health Services: (973) 948-5239, ext. 1360.

Technology and Creative Arts Courses

| Course Name | Course Number | Periods per Week | Credits |
| :---: | :---: | :---: | :---: |
| Art |  |  |  |
| Studio Foundations | 1101 | 5 | 5.0 |
| 2-Dimensional Studio | 1103 | 5 | 5.0 |
| AP 3D | 1132 | 5 | 5.0 |
| AP Drawing | 1134 | 5 | 5.0 |
|  |  |  |  |
| Career and Technical Education (CTE) |  |  |  |
| Structured Learning Experience (SLE) | 9844 | 5 | 15.0 |
|  |  |  |  |
| Clothing Arts |  |  |  |
| Clothing Arts I | 9830 | 5 | 5.0 |
| Clothing Arts II | 9832 | 5 | 5.0 |
| Clothing Art III | 9834 | 5 | 5.0 |
| Fashion | 9836 | 5 | 2.5 |
| E-Textiles | 9852 | 5 | 2.5 |
|  |  |  |  |
| Design Technology |  |  |  |
| Computer Aided Design | 9801 | 5 | 5.0 |
| CAD/Animation | 9803 | 5 | 5.0 |
| Architectural Design | 9805 | 5 | 5.0 |
| S.T.E.A.M. Connections | 9807 | 5 | 5.0 |
| S.T.E.A.M. Explorations | 9858 | 5 | 5.0 |
|  |  |  |  |
| Graphics |  |  |  |
| AP 2D Art and Design | 1130 | 5 | 5.0 |
| Digital Photography | 9817 | 5 | 5.0 |
|  |  |  |  |
| Technology |  |  |  |
| Engineering Concepts | 9838 | 5 | 5.0 |
| Engineering Systems | 9840 | 5 | 5.0 |
| Control Technology | 9842 | 5 | 5.0 |
| Robotics I | 9850 | 5 | 5.0 |
| Robotics II | 9855 | 5 | 5.0 |
|  |  |  |  |
| Video |  |  |  |
| Video Production 1 | 9826 | 5 | 5.0 |
| Video Production 2 | 9828 | 5 | 5.0 |
|  |  |  |  |
| Woods |  |  |  |
| Woods I | 9820 | 5 | 5.0 |
| Advanced Woods | 9822 | 5 | 5.0 |
| Carpentry \& Home Maintenance | 9824 | 5 | 10.0 |
| Trade Preparedness | 9860 | 5 | 5.00 |

## Art

## 1101 Studio Foundations

This course is open to all high school students and serves as a prerequisite for all other high school courses. It introduces students to basic design concepts as they apply to both 2 and 3 -dimensional works of art. Through a series of hands-on projects, students will experience how the Basic Elements of Design relate to painting, drawing, sculpture, crafts, art history, and more.

## 1103-2-Dimensional Studio

This course introduces students to the world of 2-dimensional visual art. Students will learn how to visually communicate their thoughts, feelings, and opinions, as they learn about the Elements and Principles of Design. Using a variety of two- dimensional mediums, they work hands-on, learning about basic drawing mediums and techniques, different painting styles and mediums, communicating through collage, and how master artists from throughout history have helped to shape the world of art as we know it today.

## 1132 AP Three Dimensional Art: AP 3D

This course introduces students to various techniques in three-dimensional art. Students will learn how to visually communicate thoughts, feelings, and opinions, as they learn about Elements and Principles of Design as they relate to sculpture. This course introduces clay, sculpture, fiber art, the potter's wheel, jewelry, and plaster casting. The course also explores contemporary and master artists as well as ancient civilizations relating to the art world.

## 1134 AP Drawing

This course is open to those seniors who have completed at least three years of Art courses and who have a desire to explore art further or to create a portfolio for Art school. Students will be contracted to complete a series of two or three-dimensional projects within a given timeframe. They will also work towards completing a portfolio, tear sheet, or PowerPoint Presentation as a means of archiving their high school experience in Art. Teacher recommendation required.

## Career and Technical Education (CTE)

## 9844 Structured Learning Environment (SLE)

This program is offered to 12th grade students with a driver's license and access to transportation to and from work. The students will attend school during the morning to fulfill their school requirements and will be supervised at work during the afternoons. The Structured Learning Environment (SLE) program is job training for students. It is a combined effort by the school and the community to assist in the preparation of students as they enter into an area of occupational interest.

## Clothing Arts

## 9830 Clothing Arts I

Students will learn basic sewing techniques that they will use in constructing simple garments. Four garments will be required, each one utilizing different skills. Students will learn how to read and understand pattern instructions, how to properly and safely use the sewing machine, and how to complete garments with buttonholes and zippers. Students do not need to have previous sewing experience.

## 9832 Clothing Arts II

Prerequisite: Clothing Arts I. Students with basic sewing experience will learn advanced sewing techniques. During construction of four different garments, they will learn how to work with difficult fabrics such as knits, silky polyester, velour and velvet. They will learn to work with patterns requiring advanced details. Use of advanced equipment and tools will be stressed including, but not limited to, the Serger embroidery machine with computer applications. Fashion careers will be explored.

## 9834 Clothing Arts III

Prerequisite: Clothing Arts I and II. This is an advanced course with an emphasis on tailoring techniques. Students will work with designer patterns to learn the skills necessary for fine detail work. During the second half of this course, students will work on original designs. The course helps to develop an appreciation for fine fabrics and quality workmanship as well as prepare students for entry into fashion-related careers. Students will plan and execute a Creative Arts presentation.

## 9836 Fashion

Fashion is one of America's largest industries and consumes a major portion of the family budget. The course will educate students about the many areas that are involved in the fashion industry. Students will study fabrics and their uses to learn how garments will look and wear. Students will learn about the history of fashion in order for them to know more about style and design. Students will also study marketing and retailing, fashion buying, apparel manufacturing, and careers in the fashion industry. Work will include individual and group projects, homework assignments, quizzes, and tests.

## 9852 E-Textiles

In this half-year course, students will learn basic sewing techniques that will be used to produce projects that incorporate e-textiles. Using engineering principles garments and accessories will be created. Apparel upcycle, recycle, redesign, and reuse projects will also be addressed. This is a project-based learning experience that reinforces real world application. Students will use technology, concepts, systems and operations including: the sewing machine, serger, and computer-aided embroidery machine.

## Design Technology

## 9801 Computer Aided Design

This course will enable students to communicate effectively in the technical society in which they live. Emphasis will be placed on solving problems and communicating solutions through the use of graphic language. The students will learn various visual communication techniques including freehand sketching, computer modeling, and 3-dimensional modeling using various materials including 3D printing of projects. A major emphasis is placed on using the computer aided design tools and programs. They will learn the graphic language and the theories of projection necessary to interpret and present information in graphic form. Areas of concentration will be: using the computer to access information, developing and presenting their ideas, and producing quality documents to convey thoughts to others.

## 9803 CAD/Animation

This course will introduce students to the techniques of animation, and the proper use of sketching and storyboard. Students will learn how to apply materials and properties to models, create backgrounds for scenes, create/utilize lights in a scene and different ways to produce output.

Students will begin animation through the use of sequencing, key frames and interpolation, and using physical simulations and kinematics. They will understand modeling techniques and methods in CAD programs, 3-dimensional modeling, and photo-realistic rendering techniques. CAD applications and proper care and use of tools will be discussed.

Students will process their projects for sound, enhancements, after effects and will create dubbing/mixing for final project delivery.

## 9805 Architectural Design

This will introduce students to the definition of architecture, how it has developed throughout history and characteristics of each era. They will learn the methods and importance of freehand sketching and mechanical drawing, necessary tools and proper use. Computer-Assisted Design programs in architecture and office standards in drafting are taught.

Students learn about ergonomic design, community planning, and energy efficient 'green architecture' considerations. They will understand design factors that go into residential floor plans, architectural rendering, and 3-dimensional modeling/ materials and tools required for fabrication.

## 9807 S.T.E.A.M. Connections

This course will introduce the students to the design process starting from the identification of problems to researching solutions, refinement of ideas, testing, evaluation, implementation, client feedback, and redesign. The process of documentation and research techniques will also be applied. Students will be instructed in the art of written, graphic and verbal communication techniques, the methods and mediums of each, how to enhance graphic representations, and applying these options to a design solution for presentation.

Students will also be introduced to the business world and understand the importance of marketing considerations when designing a final product. Basic elements of 2-dimensional and

3-dimensional modeling will be covered, including why they are needed, what materials are used for effect, and the various tools involved in their creation.

## 9858 S.T.E.A.M. Explorations

S.T.E.A.M. Explorations provides an immersive technology rich environment using up to date equipment and practices to develop college and career readiness. Exploration of design project-based learning will be the focus of this class. Students will create design solutions to complex real world problems through the application of engineering and interdisciplinary design processes.

The course will consist of units that are designed to target the following topics:

- Design Technology
o Architecture
o Engineering
o Robotics
- Visual Arts
o 2D
o 3D
o Digital Graphic Design
o Digital Photography
o Digital Video Production


## Graphics

## 1130 AP 2-D Art and Design

Prerequisite: Must have passed STEAM Explorations with a "B" grade or satisfactory portfolio submission to be approved by the teacher.

The AP Art and Design course framework is composed of course skills, big ideas, essential questions and enduring understandings, learning objectives, and essential knowledge. Students will develop a quality portfolio that demonstrates a mastery of concept, composition, and executive in 2D design. This course is based on a student creating a body of work that demonstrates quality, concentration, and breadth culmination in a final portfolio to be submitted to the College board for college credit.
Each of the three skill categories consists of skills that encompass foundational to advanced learning over the span of the course. Students need to develop, practice, and apply these skills in a variety of contexts.

- The AP 2-D Art and Design course framework is made up of three big ideas. As always, you have the flexibility to organize the course content as you like.
- Big Idea 1: Investigate materials, processes, and ideas.
- Big Idea 2: Make art and design.
- Big Idea 3: Present art and design.
- The AP Art and Design framework included in the course and exam description outlines distinct skills that students should practice throughout the year-skills that will help them learn to develop inquiry around the thinking and making of art. Skills 2 and 3 are specifically assessed in both portfolio sections (Sustained Investigation and Selected Works).


## 9817 Digital Photography

Prerequisite: Graphics I / Visual Communications and/or teacher recommendation. This course will provide students with an opportunity to explore digital photography, emphasizing the relationship between the new digital imaging processes and camera techniques.

Students will learn how to use digital cameras, photography techniques, design and layout skills, Internet search and retrieval, and digital software. Students will
be introduced to rules of composition, history of photography, master photographers, and the career opportunities in photography. Focus will be to create an efficient digital workflow using basic image-editing skills and software in a computer environment.

The course includes instruction in the scanning processes, lighting, image editing software, digital workflow, digital portfolio creation and output for print media. It will fulfill requirements for NJ Core Content Standards in Visual \& Performing Arts.

## Technology

## 9838 Engineering Concepts

This course enhances the students' critical thinking skills, problem-solving abilities and provides them with a working knowledge of principles and concepts related to the areas of civil \& mechanical engineering. Projects include Trebuchets, CO2 Cars, Power Pole Airplanes, and Rocketry.

## 9840 Engineering Systems

Prerequisite: Engineering Concepts and teacher recommendation. Engineering Systems activities present an opportunity for students to do engineering the same way that engineers do it. Students can work together to identify opportunities and problems, explore alternatives, create models and test them.

Internet and computer-aided design software make it feasible for students in multiple locations to work together to develop solutions to complex engineering challenges. Engineering Systems will focus on projects with multiple systems to produce a final product. These are the projects in the Engineering Concepts course: Electromagnet Motors, Monster Trucks, Wind Powered Generators, and Collaborative Internet Design Project.

## 9842 Control Technology

Prerequisite: Engineering Concepts, Engineering Systems and teacher recommendation. Control Technology is a
source designed to expose students to mechanical, electrical, robotics, radio control, automation, instrumentation and regulation of technical processes.

Throughout the course, students will solve control problems both by applying what has been learned in lessons, demonstrations and through guided discovery of technical problems.

- Concept Cars
- Short-wave radios
- Autonomous Robots
- Super Capacitor Airplanes


## 9850 Robotics I

This course will provide students with an opportunity to continue to explore the field of robotics that they began with their previous Introduction to Robotics, 8th grade class. Robotics will help to enhance students' problem-solving abilities and logical cognitive capabilities, as well as their creative-thinking and hands-on building techniques with basic tools. Students will learn how to build and program robots using VEX Robotics kits as well as a variety of materials to construct their own robots from scratch.

This course will introduce concepts of Robotics to students through hands-on activities, educational videos, and in-depth class discussions. Students will be presented with many opportunities to explore new concepts using previous learning experiences in 8th grade robotics, math, and science.

## Technology

(Continued)

Students will be given open-ended problem-solving activities to design and build a series of solutions, using the technological design loop model. This class is geared to students who have an interest in an engineering career or are considering greater applications of math and science. Students will also explore robotic programming software daily documentation, time data and materials management, and other various presentation techniques. Students will also have the opportunity to join a robotics team that will participate in local and regional competitions such as VEX Robotics competitions.

## 9855 Robotics II

This course is designed to provide students with an opportunity to continue to explore the field of robotics beyond the prerequisite Robotics I. Robotics II will focus on system integration and be project based. Students will work together to apply the theoretical constructs learned in Robotics I to real world applications by building and programming robots that comply with predefined criteria and constraints. This course will continue to build upon earlier learned concepts through personal research, hands-on activities, and in-depth class discussions. Students will also be presented with opportunities to explore new concepts through self-guided exploration. Students will be given open-ended problem-solving activities to design and build a series of solutions using the technological design loop model. This class is geared towards students who have an interest in an engineering career or are considering greater applications of math and science. Students will also explore robotic programming software, daily documentation, time data and materials management, and various presentation techniques. Students in this class will have the opportunity, and be encouraged, to participate in local and regional robotics competitions.

## Video

## 9826 Video Production 1

Video Production 1 is a full-year course dealing with the world of video production, its related careers, and technical equipment. This course is designed to equip students with the skills necessary to function in a media-oriented society. Students will develop skills for use in a fully equipped video production studio. This course provides experiences in oral presentation, script writing, writing for television, as well as technical skill development acquired in the production of a variety of videos.

## 9828 Video Production 2

Prerequisite: Video Production 1. VP 2 (Television and News Production) is a full-year course that focuses on video production as it relates to the world of television and news production. Students will have the opportunity to shoot news stories, create news broadcasts, develop broadcast journalism skills, experience being a news anchor, develop skills editing television news stories, and work with a team to produce a television news show. Though many experiences within the world of video production overlap, the primary focus of this course will revolve around television news.

## Woods

## 9820 Woods I

This is a beginner woodworking course. It is intended to provide students with basic woodworking and machine tool skills. The emphasis is on small projects to impart basic skills with as little frustration as possible. Students will create finished projects starting with rough lumber and progressing through each machine operation as needed.

## 9822 Advanced Woods

Advanced Woods Prerequisite: Wood I and teacher recommendation. This is a second-year woodworking course. Students in this class are expected to master intermediate to advanced wood-working skills. The emphasis is on skills and tools needed to produce usable and attractive furniture.

## 9824 Carpentry and Home Maintenance

Prerequisite: Woods I, Advanced Woods and teacher recommendation. Utilizing two periods, Carpentry and Home Maintenance is an advanced woodworking course. Students are expected to master intermediate to advanced woodworking skills. The emphasis is on the skills and tools needed to produce usable and attractive furniture.

The course will follow the same outline and objectives of the Advanced Woods course with added information and emphasis appropriate for this advanced course. Teaching methods will include lecture and demonstration.

## 9860 Trade Preparedness

To help prepare students for an entry-level career as an electrician, plumber, construction, HVAC technician and manufacturing at the apprentice level in the residential and light commercial industrial and construction fields. The mission of the Trade's Preparedness Education is to provide all students with educational opportunities through balanced and diversified career and technical education programs. The programs are designed to increase knowledge, to develop skills, and to refine attitudes necessary to prepare students for a place in the labor force, military or for further education.

Prerequisite Woods I or permission of instructor.

World Languages

| Course Name | Course <br> Number | Periods <br> per Week | Credits |
| :---: | :---: | :---: | :---: |
| College Prep |  |  |  |
| CP Spanish I |  | $\mathbf{1 7 0 0}$ | 5 |
| Advanced College Prep |  |  | 5.0 |
| ACP Spanish I | $\mathbf{1 7 0 1}$ | 5 |  |
| ACP Spanish II | $\mathbf{1 7 0 2}$ | 5 | 5.0 |
| ACP Spanish III | $\mathbf{1 7 0 3}$ | 5 | 5.0 |
| ACP French I | 1712 | 5 | 5.0 |
| ACP French II | 1713 | 5 | 5.0 |
| ACP French III | $\mathbf{1 7 2 1}$ | 5 | 5.0 |
| ACP German I | $\mathbf{1 7 2 2}$ | 5 | 5.0 |
| ACP German II | $\mathbf{1 7 2 3}$ | 5 | 5.0 |
| ACP German III |  | 5 | 5.0 |
| Honors/AP | $\mathbf{1 7 0 4}$ |  |  |
| Spanish IV Honors | $\mathbf{1 7 0 5}$ | 5 | 5.0 |
| AP Spanish | $\mathbf{1 7 1 4}$ | 5 | 5.0 |
| French IV Honors | $\mathbf{1 7 2 4}$ | 5 | 5.0 |
| German IV Honors |  | 5.0 |  |

## Note:

One year of world language is required for graduation. Colleges want two years of world language. Competitive colleges want three to four years of the same world language.

## World Language Courses

## 1700 Spanish I (College Prep)

This hands-on course allows students to embrace language by learning many different topics. Culture is introduced in this course. All grades are welcomed in this course of study.

## 1701 Spanish I (Advanced College Prep)

This course is designed as a means of communication, both oral and written. Students will learn new grammar concepts while learning to read, write, \& speak Spanish at elementary levels. Culture will be infused throughout the curriculum. All grades are welcomed in this course of study.

# World Languages 

(continued)

## 1702 Spanish II (Advanced College Prep)

This will reinforce language skills (speaking, listening, reading and writing) acquired in Spanish I. Students will learn new concepts, grammar, vocabulary, and functions as well as broaden communication skills. This is accomplished by practicing in meaningful, realistic situations, \& interactions.

## 1703 Spanish III (Advanced College Prep)

The goal is to help students develop linguistic proficiency and cultural sensitivity towards Hispanic cultures. Students will review previous concepts and learn to provide and obtain information, express feelings and emotions, and exchange opinions.

## 1704 Spanish IV Honors

This course reviews and develops language skills in Spanish through a communicative approach. There will be an intense, accelerated study of grammar, emphasis on composition skills, and vocabulary acquisition. Oral comprehension and proficiency will be stressed. Speaking, listening, reading and writing activities relate to topics that reflect daily life. The student is expected to show great independent initiative when handling texts and great sophistication in using language.

## 1705 AP Spanish

By design and intent, the AP Spanish course will allow students to, "Develop [their] Spanish language skills and learn about the cultures in Spanish-speaking parts of the world. [Students will] practice communicating in Spanish and study real-life materials such as newspaper articles, films, music, and books" (apstudnets.collegeboard.org). Students will understand Spanish, hold conversations, and write assorted pieces in Spanish. The course will center around six units that include families, the influence of language and culture on identity, art, science and technology, factors that impact the quality of life, and environmental, political and societal challenges.

## 1711 French I (Advanced College Prep)

This course will enable students to attain a measurable degree of communicative competences and proficiency in each of four language skills: listening, speaking, reading, and writing. This serves as a prerequisite for French II.

## 1712 French II (Advanced College Prep)

This reinforces four language skills (speaking, listening, reading, writing) acquired in French I. Students will learn new concepts, grammar, vocabulary, and functions, and broaden communication skills, by practicing in meaningful, realistic situations and interactions. Students will broaden their knowledge of and exposure to life in French-speaking regions. This serves as a prerequisite for French III.

# World Languages 

(continued)

## 1713 French III (Advanced College Prep)

This course is designed to reinforce each of the four language skills: listening, speaking, reading, and writing acquired in French II. The student will learn new concepts by practicing them in meaningful, realistic situations and interactions. This serves as a prerequisite for French IV Honors.

## 1714 French IV Honors

This course is designed to reinforce four language skills: listening, speaking, reading, and writing in French III. The student will learn new concepts by practicing them in meaningful, realistic situations and interactions. The student is expected to display great independence and responsibility.

## 1721 German I (Advanced College Prep)

This will acquaint students with the four language skills to communicate in the target language. Emphasis is placed on listening and speaking skills. Also important is written communication via good understanding of basic grammar. Students will read short passages in the target language. Some topics that are covered are basic conversational techniques, conjugation of regular verbs, classroom objects, family, sports, and telling time. The culture of the German-speaking countries is introduced. This serves as a prerequisite for German II.

## 1722 German II (Advanced College Prep)

Further communication in the target language is stressed with greater emphasis on grammar and writing. Students will learn new vocabulary and grammar structures such as: places in and around the city, navigating through a city, giving/asking for directions, conjugation of verbs in future/present perfect tenses, and prepositional phrases. Culture is further explored. This serves as a prerequisite for German III.

## 1723 German III (Advanced College Prep)

This course continues to focus on grammar, vocabulary, and culture. German I and German II provide a strong foundation for the lessons in this course. The lessons are designed to present new material in a way that builds off mastery of lessons from previous years. Students will
demonstrate thoughtful, meaningful and well-rounded skills through speaking and writing assignments. Listening and reading skills are also enhanced. This serves as a prerequisite for German IV..

# World Languages 

(continued)

## 1724 German IV Honors

The course focus is to review/build upon language structures and content that the students have studied in previous levels. Students will do literary analysis, cultural research, apply various German verb tenses, focus on sentence structure in German. They will create texts, a short play, a brochure, and share German traditions with their friends and family. Furthermore, students will practice communication skills in real-life scenario role-plays. The students are expected to display great independence and responsibility.

