# Henry P. Becton Regional High School



Carlstadt-East Rutherford Regional School District



Program of Studies 2020\_2021

"Excellence in Education"

# **HENRY P. BECTON REGIONAL HIGH SCHOOL**

### **PROGRAM OF STUDY**

Henry P. Becton Regional High School is a four year comprehensive high school which strives to meet the general and individual needs of the students and the Carlstadt and East Rutherford communities. A variety of subjects are offered in order to prepare those students who plan to continue their education beyond high school and for those students who may seek employment after high school. Through curricular offering, extra-curricular activities, counseling and special services, our school assists each student in achieving his/her goals, developing character and recognizing responsibility.

### **GUIDANCE PROGRAM**

All staff members share the responsibility of insuring that students attain their greatest potential educationally, socially and vocationally. Working as a team, counselors, teachers, administrators, psychologists, social workers, learning disability specialists, student assistant counselors, the school nurse and parents help students achieve this goal. Counselors meet with students on an individual basis or in small groups to discuss school adjustment, career planning and personal concerns. If additional help is needed, other members of the support staff are consulted.

### **GUIDANCE SERVICES**

Guidance services include: group and individual counseling, testing, recordkeeping, scheduling, career school and college conferences, military information, referral, listing of job opportunities, and scholarship opportunities and summer school offerings.

The following are some of the topics a student may wish to discuss with a counselor:

- 1. Schedule
- 2. Courses
- 3. Grades
- 4. Getting a Job/Choosing a Career
- 5. Planning for future schooling

- 6. Standardized Test Results
- 7. Crisis Issues
- 8. Drugs or Alcohol Problems
- 9. Interpersonal Relationships
- 10. Other personal concerns

#### **APPOINTMENTS**

Students complete google form on the guidance webpage to make an appointment.

# **COURSE PLANNING**

The school counselors will meet with each student individually, between late January and mid-March, to assist with planning an appropriately rigorous course of study for the next school year. Students will receive advanced notification of their appointment for this Course Planning Conference. During the conference, school counselors will discuss teacher recommendations, graduation requirements, elective course offerings, and student interests and goals. A list of course requests will be provided to parents for review.

# Since it is inevitable that some scheduling conflicts will arise, students must come prepared with alternates for all elective selections. No changes to course requests may be made after March 15th.

Note: Course level recommendations are made for each student based on the assessment of our professional faculty. Students are encouraged to speak with their current teachers regarding placement recommendations and selection options prior to meeting with the school counselor. In addition, students and parents are encouraged to review this program to become familiar with all course options.

# INCOMING FRESHMAN SCHEDULING

Placements for English language arts, mathematics, science, and social studies are determined through the utilization of specific, multiple, educationally-related, objective criteria. Placement rubrics, which include the specific placement criteria, have been developed for each subject Area.

# MAPPING A FOUR-YEAR PLAN

It is essential that all students plan a high school educational program that is academically stimulating, personally enriching and best prepares them for higher education. We recommend that all students take appropriately rigorous coursework; the most challenging the student can handle without creating an undue burden.

Graduation requirements will provide a solid foundation, but students should look to go aboveand-beyond the general requirements, taking additional academic coursework to enhance preparation for future endeavors. Students should strive to take at least five (5) academic courses each year in the core content areas (English language arts, science, mathematics, social studies and world language).

Students are encouraged to track their progress toward meeting graduation requirements and plan ahead by outlining a four-year course plan for college/career readiness.

# PREPARATION FOR COLLEGE ADMISSIONS

College admission counselors will expect a student's high school record to demonstrate academic rigor, and quality of academic performance. The chart on Page 13 outlines the coursework recommended to build a stronger transcript for college admissions. Some colleges and college programs may have specific requirements. Considering the vast number of institutions of higher learning and the side variety of admission standards, it is wise to consult college websites for individual school and program requirements. Consult with your counselor or the admission offices for additional information.

Whether preparing for college or a career, a strong academic foundation is critical for any individual to be competitive.

# GUIDELINES FOR REQUESTING SCHEDULE CHANGES

Students are expected to carefully consider the courses chosen during the course selection process. When a student selects a course, he/she is making a "reservation" that drives the creation of the Master Class Schedule. Please note the following:

- Schedules will be viewable in Genesis in mid-August.
- All requests are subject to administrative approval and course availability.
- A request may be rejected if the deadline for changes or withdrawals has passed, a section is filled, sections become grossly imbalanced, or the course is required for graduation.
- Students may not request a change based on preferences for teachers, lunch periods, or semesters.
- Students who failed a course under a specific staff member may request a course section change, if available.
- Changing or withdrawing from a course may adversely affect section planning, class sizes and course enrollment.
- Students will only be permitted one (1) schedule change appointment for any drop/adds or elective changes. The appointment must be made prior to the schedule change deadline. Students may not change the schedule back to the original selection(s).
- Changes will not be accepted after the established deadlines (see below).

#### **REQUEST DEADLINES**

The chart below outlines specific deadlines to which BRHS will strictly adhere. Please plan accordingly to ensure that requests are submitted in a timely manner.

Type of Request	Deadline/Window	Important Note	
Course Request Changes	February 15th	Students may need to make changes to course requests after this deadline, with the exception of approved level changes (see below).	
<u>Request to Level Up</u>	Requests will only be accepted between March 1st thru May 1st.	Teacher, Department Supervisor and parent/guardian permission required.	
Request to Level Down	The end of MP1	Parent/guardian permission required, and must be submitted in writing.	
Schedule Change Full Year/Semester 1	The 5th day of class	No grade will be recorded. Student may move into open courses and will be responsible for any work missed to date. Schedule changes must be criteria on schedule change form.	
Schedule Change Semester 2	The 5th day of class	No grade will be recorded. Student may move into open courses and will be responsible for any work missed to date. Schedule changes must be criteria on schedule change form.	
Drop Full Year Course	The end of MP1	*If request is approved beyond the deadline, the transcript will reflect one of the following: "WP"-Withdraw/Pass "WF"-Withdraw/Fail "F"-Failing Grade	
Drop Semester 1 Course	The middle of MP1		
Drop Semester 2 Course	The middle of MP3		

# **REQUESTS TO LEVEL UP**

# A student may submit a request to level up ONLY between March 1st and May 1st. All

requests are subject to administrative approval and course availability.

Student must complete a *Level Change Request Form* using the Google form link found on the School Counseling website. After the form is submitted, the following will occur:

- 1. Teacher needs to make recommendation for level up.
- 2. The supervisor will make a decision on student request.
- 3. The Supervisor will share the placement decision with the parent/guardian and student.
- 4. If the student meets the criteria, the student's schedule will be adjusted.

#### **REQUIREMENTS FOR PROMOTION AND GRADUATION**

Students in grades 9, 10, & 11 will be enrolled in 40 credits each academic year. Students in Grade 12 must be enrolled in at least 35 credits based upon previously earned credits. Students are advised to take 5 academic and 2 elective subjects, along with physical education/health. A typical schedule for a student is as follows:

5 Academic	=	25 Credits
2 Electives	=	10 Credits
1 Physical Education/Health	=	5 Credits
Total	=	40 Credits

Failure credits may be made up in summer schools with prior administrative approval. Annual student promotion to the next grade requires a given number of earned credits.

In order to successfully graduate from Henry P. Becton Regional High School, students in the following classes below must meet the minimum number of credits established for their graduating class:

### Class of 2018 = 135 Credits Class of 2019 and Beyond = 140 Credits

In order to successfully advance to the next grade level, students in the following classes must accumulate the minimum number of credits established below:

	You must have obtained a minimum of:	Credits needed to Graduate
In order for the <u>Class of 2023</u> to advance to Grade 10	20 credits	140
In order for the <u>Class of 2022</u> to advance to Grade 11	60 credits	140
In order for the <u>Class of 2021</u> to advance to Grade 12	100 credits	140
In order for the <u>Class of 2020</u> to Graduate	140 credits	140

### CREDITS FROM OTHER SCHOOL DISTRICTS WILL BE ACCEPTED TOWARD GRADUATION WITH PRIOR APPROVAL REQUESTED, IN WRITING, BY THE PARENTS AND/OR GUARDIANS AND APPROVED BY THE PRINCIPAL.

Students must select 5 academics a year, 6 academics in one year and 2 electives must have the approval from their school counselor.

Select failure credits may be made up in summer school with prior administrative approval at the expense of the parent/guardian. Few summer schools offer Physical Education credits.

Courses requiring research papers may be made up in summer school only if the paper requirement is fulfilled at Henry P. Becton Regional High School as scheduled.

Any course(s) with a final mark of 55 or less or a course(s) where a student compiled 28 or more absences may not be made up in summer school unless administratively approved.

### HENRY P. BECTON REGIONAL HIGH SCHOOL CURRICULA REQUIRED SUBJECTS

The successful completion of a program of study in grades nine through twelve shall include the following state and local school district requirements:

- 1. At least 20 credits in language arts literacy (English 9-12)
- 2. At least 15 credits in mathematics, including Algebra I, Geometry, and Algebra 2
- 3. At least 15 credits in science
- 4. At least 15 credits in social studies, including World History, United States History 1 & 2
- 5. At least 4 credits in health, safety, and physical education during each year of enrollment
- 6. At least 5 credits in visual and performing arts (Practical arts courses may be used to fulfill this requirement)
- 7. At least 5 credits in world language
- 8. At least 5 credits in  $21^{\text{st}}$  century life and careers, or career technical education
- 9. At least 2.5 credits in financial, economic, business and entrepreneurial literacy

10. Electives and/or individualized student learning opportunities as determined by the high school program sufficient to total a minimum of credits for the following classes:

### Class of 2019 and Beyond = 140 Credits

11. In addition to the minimum credit requirements, all students must meet one of the statewide assessment graduation requirements as determined by the New Jersey Department of Education (NJDOE).

#### High School Graduation Assessment Requirements

In addition to fulfilling all local graduation requirements, students must demonstrate proficiency in both English language arts (ELA) and mathematics by meeting the criteria as outlined below.

#### CLASS OF 2021 AND 2022

Students can meet graduation assessment requirements through any of these three pathways:

1. Achieve passing scores on high school level New Jersey Student Learning Assessment (NJSLA) for Algebra 1 and ELA10; or

2. Achieve scores on alternative assessments such as the SAT, ACT, or ACCUPLACER (as defined in the document linked below); or

3. Submit, through the district, a student portfolio appeal to the NJDOE.

Each school year, the New Jersey Department of Education (NJDOE) determines the proficiency level and/or cut scores needed on the assessments to meet the graduation assessment requirements. The current proficiency levels/cut scores issued by the NJDOE can be found on the second page of the document linked below.

https://www.state.nj.us/education/assessment/parents/GradReq.pdf

Note: Special Education students, whose Individualized Education Plans (IEPs) specify an alternative way to demonstrate proficiencies, will continue to follow the graduation assessment requirements set forth in their IEPs.

#### CLASS OF 2023 AND BEYOND

The NJDOE is committed to providing fair notice to students and educators and will continue to collaborate withstakeholders to transition to the next generation of statewide assessments.

## **DUAL ENROLLMENT COURSES**

Becton Regional HS has partnered with several colleges/universities as depicted in chart below. Students who enroll in these courses that are affiliated with the aforementioned universities/colleges are responsible for tuition as required by each university, if applicable. Becton teachers have been approved by the respective university/college to teach dual enrollment courses. Tuition is subject to change (rates indicated below are for the 2018-2019 school year).

High School Course Name	College Course Code	Affiliation	Credits	Tuition	Registration fee
English 12 CP	WRT-101	BCC	3	\$216.39	\$15
US History 2 AP	HIS-112	BCC	3	\$216.39	\$15
US Gov. & Politics AP	POL-101	BCC	3	\$216.39	\$15
AP Biology	Bio-101	BCC	4	\$288.52	\$15
AP Chemistry	Chm-100	BCC	4	\$288.52	\$15
Anatomy & Physiology	Bio-109	BCC	4	\$288.52	\$15
AP Physics-Alg. Based	Phy-186	BCC	4	\$288.52	\$15
Spanish 4 Honors	Lan-113	BCC	3	\$216.39	\$15
Italian 4 Honors	Lan-112	BCC	3	\$216.39	\$15
Pre-Calculus	MATH-104	STAC	3	\$225	0
Calculus	MATH - 201	STAC	4	\$225	0
Calculus Honors	MATH - 201	STAC	4	\$225	0

Bergen Community College (BCC)	St. Thomas Aquinas College (STAC)
Bergen Community College (BCC) Students are permitted to take these classes for high school credit only. If students would like to receive college credit, they would have to pay tuition for the class. A grade of 70 or higher is required to earn college credit. Tuition is reduced for students in the free lunch program. These credits are transferable to other colleges and universities. We encourage you to use NJ	<b>St. Thomas Aquinas College (STAC)</b> Students are permitted to take these classes for high school credit only. If students would like to receive college credit, they would have to pay tuition for the class. A grade of 70 or higher is required to earn college credit. Tuition is reduced for students in the free lunch program.
TRANSFER ( <u>http://www.njtransfer.org/</u> ) to see what community college courses can be	181
transferred to four year schools in New Jersey.	1 121





# Art Department

#### Intro to Comm. & TV 1:(no prerequisite)

**Full Year Course-5 Credits** 

This communication course focuses on the world around us by analyzing and interpreting information that will transmit it to an audience through a variety of written & visual media. This is a fundamental communications course that explores print, radio, internet & television production. This course continues with introductory material on script writing, camera systems, studio operations, sound for radio & television, computer graphics, editing, lighting and staging. This is a hands-on, equipment-intensive course. Students will be responsible for producing and directing in several audio/visual productions such as: interviews, news stories, magazine advertisements, PSAs, commercials, social media communications, short films, movie trailers and music videos. Students will also have an opportunity to explore and consider media career options through various field trips.

Successful completion of this course is a prerequisite for TV Production 2 & TV Internship.

#### **TV 2:**

**Full Year Course-5 Credits** 

#### (prerequisite: Intro to Communications & TV Productions 1)

TV2 is an advanced course designed to provide students with real-life work experience and help students become visual storytellers in their own voice. Students develop skills through use of cameras, advanced computer editing and multi-camera field productions. Students produce final products used in areas of news, entertainment, sports, community services and films.

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#### Art 1: Intro to Studio (no prerequisite)

**Full Year Course-5 Credits** 

This introductory course combines art history, appreciation, and analysis, while engaging students in hands-on creative projects. This foundation course is for students who are interested in developing and improving basic art skills and knowledge of artists, media, techniques, and processes of art. Emphasis is placed on the Elements of Art (Line, Shape, Form, Space, Color, & Texture), as well as the movements and trends in Art History.

#### **Art 2: Drawing & Painting**

(Prerequisite: Intro to Studio- Art 1)

This art course is for students who want to further develop and continue to improve their drawing skills and painting skills. The emphasis in this course is placed on drawing from observation using line, shape, form, texture, perspective and proportion. Painting skills in this course will be built using a variety of mediums such as watercolor, pastel, charcoal, acrylic, and tempera.

**Full Year Course-5 Credits** 

#### Art 3 & Art 4: Portfolio Art

(Prerequisite: Intro to Studio-Art 1 & Drawing & Painting-Art 2)

This course is designed for the serious art student who is considering studying drawing and painting after high school, and advanced students who are interested in acquiring new skills and further developing their talents. Students are encouraged to pursue new venues in the field of drawing, painting, self-expression and study in depth the areas of art and design that are of greatest interest to them. Students encouraged to showcase their own style through an exploration of art career related projects. At the end of the semester, they will put together an art display of all their works and complete a personal portfolio of their work.

#### Art History: (no prerequisite)

This course emphasizes a deep conceptual understanding of art and historical concepts. Students develop essential skills of visual and contextual analysis by examining famous works of art from different countries and cultures. Students will interpret meanings, intention and role of the artist for a specific work of art. This course allows students to expand their knowledge of visual storytelling as told through art.

#### **Digital Art:** (no prerequisite)

In this exploratory digital media course, students are introduced to the elements and principles of design used in visual communication. Students will be introduced to image editing, animation, and digital drawing using both the computer and the drawing tablet. Students will effectively communicate their ideas through production, critique, display, and online presentations of their work.

**Graphic Design:** (*Digital Art prerequisite*) (Grades 10,11,12)

This second level course is a continuation of Digital Arts 1 and designed for students wanting indepth experience using design software for visual communication. Students will explore design challenges and client based challenges that will further develop their knowledge of Adobe Photoshop, Adobe Illustrator, Adobe In-Design, and Adobe Animate. The class will also explore alternative methods of printing, branding and marketing design.

#### **Fashion Design:**

(Grades 11,12/ Studio Art 1 preferred)

In this <sup>1</sup>/<sub>2</sub> year course students will learn the terminology and skills necessary for a career in the fast growing industry of fashion design. Students will learn how to illustrate, stitch and re-style clothing while applying the elements and principles of design used in the fashion industry. Students will understand the relationship between history and fashion, the production of textiles, as well as the procedures necessary for marketing a new design or concept. \*\$ course materials required

#### **Full Year Course-5 Credits**

**Full Year Course-5 Credits** 

**Full Year Course-5 Credits** 

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Full Year Course-5 Credits

#### **Interior Design:**

(Grades 11,12 / Studio Art 1 preferred)

This  $\frac{1}{2}$  year course introduces students to the theories and fundamentals of interior design. Students are exposed to architectural and interior design through history, floor planning, selection materials, 2-D drawings, and 3-D computer generated designs. Students will produce a final interior design presentation board at the end of the course using their knowledge of illustration, color theory, material selection and

#### **Digital Photography:**

(Grades 10,11,12/ Studio Art 1 preferred)

Learn the mechanics of a digital camera and professional photographic techniques including F/stops, shutter speeds, lighting accommodations, depth of field, white balance, exposure settings, and the various types of digital files used in this field. Students will explore compositional elements of photography, learn basic photo manipulation, and ways to set or position up your subject. Students will work with editing software such as Adobe Photoshop, Adobe Lightroom and other online software resources to produce an original portfolio of work.

#### Cultural Art: (no prerequisite)

Travel the world through art in this hands-on creation course. Here students are introduced to a variety of two-dimensional and three-dimensional art projects centered primarily around traditional applied arts and crafts of cultures around the world. Students explore arts from different cultures and relate these traditions to creative endeavors of today. Students will work in a variety of mediums, using different techniques such as basket weaving, print-making, batik, carving, embossing, mask-making, dream-catchers and more!

# Career & Technology Education Department

Web Page Design 1 Grades 10, 11, 12

Web Page Design is a half-year course that presents aspects of creating and designing websites. Students will be introduced to design elements that enable them to create professional-looking websites for personal or business use. No coding knowledge is required for this course.

Web Page Design 2 - Coding & Gaming Grades 10, 11, 12

Web Design II Coding is a half-year course designed to expose students to the growing field of computer programming while cultivating creativity, communication, problem solving, and logic. Students will create and run programs using basic coding concepts and create interactive games

### **Full Year Course-5 Credits**

**Full Year Course-5 Credits** 

<sup>1</sup>/<sub>2</sub> Year Course-2.5 Credits

<sup>1</sup>/<sub>2</sub> Year Course-2.5 Credits

**Full Year Course-5 Credits** 

and stories. Students will be equipped with coding fundamentals to undertake additional programming courses.

#### **Introduction to Computer Science**

#### **Full Year Course-5 Credits**

Grades 10, 11, 12

#### Prerequisite (Algebra 1, Average 80 or higher)

Introduction to Computer Science is an interactive introductory course for students new to programming. Students will learn the foundations of computer science using the Python language. They will recognize and use fundamental elements of computer programs, such as commands, variables, conditionals, and loops. The course consists of daily programming exercises, longer coding assignments, regular quizzes and exams Students will develop essential career and technical skills including how to think computationally and solve complex problems.

#### **Computer Science-Programming**

#### **Full Year Course-5 Credits**

**Full Year Course-5 Credits** 

Grade 11, 12

#### **Prerequisite** (Introduction to Computer Science)

This course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data, approaches to processing data, analysis of potential solutions, and the ethical and social implications of computing. Course focuses on the details of writing computer software using the Java programming language. Emphasis on the basic ideas of software engineering and the goal of developing high-quality software. The course consists of daily programming exercises longer coding assignments, regular quizzes and exams.

#### **AP** Computer Science Principles

Grade 11, 12

Prerequisite (Introduction to Computer Science-90 or higher or Approval from Teacher)

AP Computer Science Principles (AP CSP) is a full-year, rigorous course that introduces students to the foundational concepts of computer science. The course explores the impact computing and technology have on our society. The course promotes student engagement, independent thought, and interactive collaboration with peers. The course covers a broad range of foundational topics including programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing all in strategic preparation for the AP Computer Science Principles Exam.

#### Entrepreneurship

Grades 10, 11, 12

### <sup>1</sup>/<sub>2</sub> Year Course-2.5 Credits

Entrepreneurship is an exciting half-year course for any student who has thought about starting their own business. Students will explore comprehensive business principals and identify the

unique, creative talents and skills necessary to become an entrepreneur. Students will develop essential organizational, critical thinking, and strategizing skills required to manage their own business.

#### **International Business**

1/2 Year Course-2.5 Credits

Grades 10, 11, 12

International business is a half-year course that provides students with a global business perspective of economics, political structure, and culture. Cultural customs, trade, currency, geography, current events, international marketing, global issues, and career opportunities will be major topics of discussion. Students will build a solid foundation for future courses in business and international studies.

#### Sports, Entertainment & Fashion Marketing

Grades 10, 11, 12

#### Prerequisite (Marketing in the 21<sup>st</sup> Century)

Sports and entertainment marketing is a half-year course that introduces students to the sports and entertainment industries. Students will learn about marketing strategies and trends within each industry and be exposed to various careers in the world of sports and entertainment. This course is highly recommended for students interested in pursuing a career in either sports or entertainment.

#### Marketing in the 21<sup>st</sup> Century

<sup>1</sup>/<sub>2</sub> Year Course-2.5 Credits

<sup>1</sup>/<sub>2</sub> Year Course-2.5 Credits

Grades 10, 11, 12

Marketing in the 21<sup>st</sup> Century is a half-year course that introduces students to fundamental marketing concepts. Students will explore the marketing mix or the four "P"s of marketing (Product, Price, Place, and Promotion) and the in-depth decisions involving each component as part of a marketing plan. The course will address product planning, branding and packaging, pricing and distribution strategies, promotional concepts, and marketing research. This course provides a thorough introduction to the world of marketing and serves as a prerequisite to other marketing and business courses.

#### **Computer Applications**

<sup>1</sup>/<sub>2</sub> Year Course-2.5 Credits

Grade 9

21<sup>st</sup> Century Technology Tools is a required half-year course designed to develop the technology skills needed to succeed in high school and beyond. Students will work in various software applications including Microsoft Word, Publisher, and PowerPoint to establish and enhance word processing, desktop publishing, and presentation skills. Specifically, they will create professional, real-world documents including tables, business letters, reports, flyers, brochures, and presentations while mastering the keyboard. Upon completion of the course, students will be equipped with a solid computer skill set to meet the demands of today's technology-driven world.

#### **Introduction to Business** \*Fulfills financial literacy requirement Grade 9

Introduction to Business is a half-year course designed to introduce students to the various fields in business as well important economic concepts. Students will gain perspective on marketing, entrepreneurship, and international business, topics they will see in future Career & Technical Education courses. Specifically, the course will cover topics such as economy and globalization, budgeting and saving, investing, working and earning, real estate and bonds, and risk management and insurance. The course emphasizes financial literacy in order to fulfill the financial literacy graduation requirement as required by the New Jersey Department of Education.

#### **Personal Finance**

\*Fulfills financial literacy requirement

1/2 Year Course – 2.5 credits

Grade 9

Personal Finance is a half-year course designed to prepare students for financial stability and success by managing their personal finances in an efficient and informed manner. Students will learn about income and expenses, bank accounts and services, strategies for saving, and investment opportunities and will understand the importance of creating budgets, managing credit, and ensuring personal financial security. Overall, the course is designed to help students analyze financial choices and develop and apply skills to improve their overall financial well-being.

### **Career Exploration Internship Program**

Grade 12

The Career Exploration Internship Program offers motivated high school seniors a chance to go beyond the formal education of the classroom. Students will have the opportunity to "test drive" a career through a quality internship in a field matched to their interests, abilities, and values. Students will work with a mentor in an exciting, highly-structured, well-monitored setting. The Career Exploration Internship Program delivers adult challenges, exceptional role models, and individualized learning to prepare students for the professional work environment.

# English Department

#### **English 9 (formerly English 9 CP)**

Grade 9

#### \*NCAA Approved Core-Course

The NJSLS for Language Arts Literacy serves as the foundation for the ninth grade English program. The student reads a variety of literary genres, including the short story, poetry, plays, and the novel, and learns to write for different audiences and purposes. Emphasis is also placed on speaking and listening skills as well as viewing, understanding, and using non-textual visual information. Skills necessary for effective oral and written communication are taught and reinforced, and all ninth grade English students receive library/study skills instruction. In addition, the student is required to complete a short research paper on an approved topic. Teachers employ a variety of instructional strategies and methodologies, including computer technology, to meet student needs and interests. Preparation for the NJSLA state test is a major emphasis for this class.

#### **English 9 Honors**

Grade 9

#### \*NCAA Approved Core-Course

The English 9 Honors course is dedicated to engaging advanced students in a rigorous study of genre-based literature through reading, comprehending, analyzing and interpreting classic novels, plays, short stories, and various literary selections from numerous time periods. In order to be considered for acceptance into this course, students must pass a test. Also, students must maintain an 80 average while in the class. This curriculum provides an accelerated and intensive study of these literary works and a comprehensive study of a variety of writing genres. All language arts skills are included to help the students demonstrate mastery and proficiency in writing and reading comprehension skills while meeting the new NJSLS. In addition, the student is required to complete a short research paper on an approved topic. The English 9 Honors course is designed to provide a learning environment in which the students will be exposed to an extensive variety of challenges to develop their talents and reach their highest potential. Preparation for the NJSLS state test is a major emphasis for this class.

English 10 (formerly English 10 CP) Grade 10 \*NCAA Approved Core-Course

In this course, the student reads and analyzes the nonfiction, poetry, plays, and short stories written by some of the world's most renowned authors in this college preparatory course. Emphasis is also placed on building vocabulary, developing critical thinking and reading comprehension skills, and reviewing and reinforcing English grammar, usage, and mechanics

Full Year-5.0 Credits

**Full Year-5.0 Credits** 

through a variety of language arts activities. In addition, the student is required to complete a research paper on an approved topic. The English 10 student is afforded many opportunities to improve his/her writing ability in a variety of composition forms and continues to develop speaking and listening skills as well as the ability to view, understand, and use non-textual visual information. Preparation for the NJSLSA state test is a major emphasis for this class.

### English 10 Honors Grade 10 \*NCAA Approved Core-Course

### Prerequisite: Student must have had a minimum of 90 or above in English 9 or an 80 or above in English 9 Honors

In order to be considered for acceptance into this class, students must have had at least a 90 or above in English 9 or an 80 or above in English 9 Honors. The student selected for this accelerated course studies the achievements of acclaimed American authors, analyzing each literary work in great depth. Many opportunities are provided for the student to improve his/her critical reading skills and the ability to compose a variety of written responses for different purposes and audiences. In addition, the student is required to complete a literary research paper on an approved literary topic. The English 10 Honors student continues to develop speaking and listening skills as well as the ability to view, understand, and use non-textual visual information. Vocabulary building continues throughout the school year, and the student is required to write a research paper on a topic relating to the "American experience." Preparation for the NJSLS state test, College Entrance Examinations, as well as the Advanced Placement Examination in English Literature and Composition is also a major emphasis.

#### English 11 (formerly English 11 CP)

Full Year-5.0 Credits

Full Year-5.0 Credits

#### Grade 11

#### \*NCAA Approved Core-Course

In this course, the student reads and analyzes selections from British and World Literature, including the works of Shakespeare, in this college preparatory course and continues to develop speaking and listening skills as well as the ability to view, understand, and use non-textual visual information. Grammar and usage are reviewed, and vocabulary building takes place throughout the school year. The "writing process" is emphasized as the student is afforded many opportunities to become proficient in a variety of composition forms. In addition, a research paper on an approved educational topic is a course requirement. Preparation for the NJSLS state test, as well as the Critical Reading & Writing SAT, is also a major concern.

#### Full Year-5.0 Credits

### English 11 Honors Grade 11 \*NCAA Approved Core-Course

Prerequisite: Student must have had a minimum of 80 or above in English 10 Honors

In order to be considered for acceptance into this class, students must have had at least an 80 or above in English 10 Honors. The student reads and analyzes in great depth selections from British and World literature in this accelerated course. Classics of the theater, British poetry, short story masterpieces, and famous novels are studied to develop literary appreciation, critical thinking, and reading comprehension skills. The student improves his/her writing skills through a variety of composition assignments and is required to write longer and more sophisticated papers, such as the essay of literary analysis and documented research papers on literary topics. Vocabulary building continues along with preparation for the NJSLS test, College Entrance Examinations, as well as the Advanced Placement Examination in English Literature and Composition.

#### English 12

Grade 12

#### \*NCAA Approved Core-Course

The literary focus of this course is the prose, poetry, and dramatic works written by American authors. The student continues to receive instruction in grammar and usage, mechanics, vocabulary building, and composition and is afforded many opportunities to improve speaking and listening skills as well as the ability to view, understand, and use non-textual visual information. A research paper on an approved educational topic relating to modern or contemporary life is a course requirement.

English 12 CP

Full Year-5.0 Credits

Full Year-5.0 Credits

### Grade 12 \*NCAA Approved Core-Course \*\*Dual Enrollment Course

In order to be considered for acceptance into this class, students must have had a minimum of 75 or above in English 11 or 11 CP. The student in this college preparatory course reads and analyzes selected novels, short stories, plays and poetry written by American authors as well as the work of William Shakespeare. Instruction in English grammar and usage, mechanics, and vocabulary is included. Emphasis is again placed on the "writing process" as the student is given many opportunities to master the various composition forms. An acceptable research paper on an educational topic is a course requirement. Through a variety of learning activities, students continue to develop speaking and listening skills as well as the ability to view, understand, and use non-textual visual information.

AP Literature and Composition (ENG 12 AP)

Full Year-5.0 Credits

Grade 12

\*NCAA Approved Core-Course

Prerequisite: Student must have had at least an 80 or above in English 11 Honors

The culmination of Becton's accelerated English program begins at the ninth grade level. In order to be considered for acceptance into this class, students must have had at least an 80 or above in English 11 Honors. This college level course focuses on World literature and composition. Through intensive study and discussion of selected poetry, prose, and dramatic works, the student sharpens his/her awareness of language and understanding of the writer's craft. The student's appreciation of works by renowned authors is further increased by writing essays of literary analysis and research papers on literary topics. Whenever possible, the student is exposed to music and art relating to the literature studied. Although much of the writing relates to literature, the AP student is afforded opportunities to become proficient in other forms of composition as well. Vocabulary building enables the student to continue to develop speaking and listening skills.

#### Language Arts Lab (Formerly Supplemental LA)

Full Year-5.0 Credits

Grade 9, 10, 11, 12

Becton's Supplemental Language Arts Program is designed for those students whose academic performance and test results indicate language arts deficiencies, especially those in reading and writing. An ISIP (Individual Student Improvement Plan) is developed for each identified student and various teaching methods and strategies, including computer technology, are utilized in instruction. Successful performance on the PARCC (The Partnership for Assessment of Readiness for College and Careers) is a desired outcome of the program.

#### **English SAT/ACT Prep**

<sup>1</sup>/<sub>2</sub> Year Course-2.5 Credits

Grade 11

This course is designed to help 11<sup>th</sup> grade college preparatory students raise their SAT and ACT scores. It also motivates students to embrace the college process through college visits and projects. Offered in conjunction with the Math SAT/ACT Prep course. This SAT/ACT English Prep course focuses on vocabulary building and critical reading skills as well as writing and language skills. The course also incorporates test-taking strategies and techniques needed to improve scores. Students read a variety of selections in the humanities, social sciences, natural sciences and narration taken from test preparation books and workbooks. Sufficient practice is provided so that the students become comfortable with the tests, techniques and timing required for improved performance.

Journalism(School Newspaper) Grades 10, 11, 12 \*NCAA Approved Core-Course

This full-year elective is provided for those students who are interested in the various aspects of the field of journalism. The techniques and practices involved in newspaper production are taught and an appreciation for good news coverage in a democracy is developed. Classroom technology, including the Internet, is utilized by students to complete assignments. Journalism students are also encouraged to join the staff of the school newspaper, *The Cat's Eye View*. Students can express their creative writing talent through feature writing, editorials, and

personality profiles and columns. Students who participate in this class will be involved with the production of the school's newspaper, The Cats Eye View.

#### **Dramatics (formerly Theater 1)**

Grades 10. 11. 12

This elective course introduces tenth, eleventh and twelfth grade students to the world of the theater. They learn the techniques of acting and directing, as well as some of the more technical aspects of play production. Exercises are given to strengthen imagination, motivation, concentration and sense recall. Students are afforded many opportunities to perform in front of their peers, both alone and in groups, and peer evaluations of performances are encouraged. Emphasis is also placed on developing an appreciation for the dramatic form of literature.

#### **Public Speaking**

Grades 11, 12 \*NCAA Approved Core-Course

This course is designed to help the student improve his/her oral communication skills in a variety of speaking situations, strengthen his/her self-confidence, and gain an awareness of the essential role that communication has in his/her life and the lives of others. It provides instruction in developing good listening skills, pronunciation and enunciation, conversational techniques, preparation of a speech, group discussions, debates, interviews, and various types of public speaking situations. The student learns to speak clearly and effectively by participating in a variety of learning activities and also has the opportunity to compete on an interscholastic level.

#### **Film & Literature**

*Grades* 11. 12

This course is for students who love film as well as reading. The course examines the relationship between film and literature while seeking to answer the essential questions "Is film literary?"; "Can film narrate the way text can?"; "Can film describe the way text can?", and "Can changes in the text still preserve the essential message or emotion of the text?" The course aims to sharpen appreciation of major works of cinema and of literary narrative, and examines the literary nature of film. This course also considers the components of filmmaking and seeks to develop in the student a more critical eye and appreciation of aesthetic style while viewing film.

**English as a Second Language (ESL)** Grades 10, 11, 12

The English as a Second Language (ESL) Program is designed to provide English Learners with sufficient language experiences to develop proficiency to meet academic standards using reading, writing, speaking and listening skills. All ESL classes are based on content-and-grade-

**Full Year – 5 Credits** 

Full Year-5.0 Credits

Full Year-5.0 Credits

level standards and ware intended to supplement but not conflict with or replace regular classes. English learners are taught in core content classes of English language arts, science, social studies and mathematics.

Our goal is to prepare students to function successfully in their mainstream classes, as well as the school community. Instruction is tailored according to the needs of the students and the level of proficiency. A variety of instructional approaches and resources is utilized, including technologies as a tool for learning. Preparing students for a successful performance on the state's NJSLS is emphasized.

#### College & Career Readiness

#### Full Year-5.0 Credits

Grade 12

College & Career Readiness is a full-year course designed to help students maintain success while attending college and when entering the workforce. The course is designed to focus on college-level writing and the most current informational texts so students are prepared on what to expect when leaving high school. Students are guided through the college application process and will be exposed to multiple speakers who are experts in post-secondary schools and career opportunities.

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**Culinary 1** *Grades 9, 10, 11, 12* 

### Full Year-5.0 Credits

This course is designed for students interested in the topics of food preparation and nutrition. Students will learn basic food preparation skills through practical application. Emphasis is placed on providing a variety of hands on healthy cooking experiences. The focus will be on making nutritious food choices that promote lifetime health.

*Nutrition:* Terminology, nutrients, digestion, calories, healthy eating/cooking, food processing (frozen, canned, dried), food guide pyramid, dietary needs, fast food and convenience food versus cooking from scratch, meal planning, careers.

*Food Preparation:* Terminology, equipment, safety, food safety, recipes, kitchen math, proper measuring techniques, selecting and storing foods, shopping skills, table setting and etiquette, careers.

*Food Preparation Labs:* Quick breads/yeast breads, skillet dishes/main dishes, soups, stews, eggs, cheese, pasta, rice, grains, fruits, vegetables, salads, healthy snacks and desserts, careers.

#### **Culinary 2-Advaned Baking**

Grades 10, 11, 12

The advanced baking course dives deep into the art and science of baking. This course involves: basic baking, breads, quickbreads, cakes, and plated pastries, all lessons are practiced with hands-on application. This course is taken after food/kitchen basics so there is already a base knowledge set in place that we will grow upon. Other focuses of study will also take place including: function of ingredients, recipe conversion/alterations, catering, and design.

#### **Pro-Start 1**

Grades 11, 12

The Pro-Start 1 course will meet the individual needs of students seeking a career in the Culinary field after high school as well as provide a pathway for the first certification program within Becton Regional High School. In addition, the course will meet the New Jersey Department of Education graduation requirements for practical arts, career education and consumer, family and life skills and 21st century life and careers, and/or career technical education.

#### Pro-Start 2

Grade 12

The Pro-Start 2 course is the final course needed to fulfill the culinary certification program for our students. Similar to Culinary III, the course will meet the individual needs of students as well as provide a pathway for the first certification program within Becton Regional High School. This is an advanced level course for the most serious of students seeking a career in the Culinary field after high school. In addition, the course will meet the New Jersey Department of Education graduation requirements for practical arts, career education and consumer, family, and life skills and 21st-century life and careers, and/or career technical education.

# Mathematics Department

#### Algebra 1

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

This course examines the basic structure of real numbers, algebraic expressions, and functions. The topics studied are linear equations, inequalities, functions and systems, quadratic equations and functions, polynomial expressions, data analysis, probability, and the elementary properties of functions. Mathematical modeling of real-life problems and problem solving are major themes of the course.

Algebra 2 Grades 10, 11, 12 Full Year-5.0 Credits

Full Year-5.0 Credits

#### Full Year-5.0 Credits

Full Year-5.0 Credits

#### **Prerequisite:** Geometry

Third level of college preparatory mathematics introduces concepts which are of great importance in higher mathematics and demonstrates how these are consequences of an extension of the basic principle of real numbers. Some topics developed are: inequalities, greatest-integer and fractionalpart functions, laws of exponents, prime numbers, continuous functions, roots, conic sections, exponential and logarithmic functions, and various scientific applications.

#### **Algebra 2 Honors**

Grades 10, 11

This is the 3rd course in the accelerated series. Algebra is presented as a study of numbersystem structure. The use of extensive exercises and problem material helps the student to understand the principles involved, to gain skill in applying them, and to appreciate their usefulness. The course also includes a complete treatment of trigonometry.

#### Geometry

Grades 9, 10, 11, 12

#### Prerequisite: Algebra 1

Major goals of this course for college-bound students are the development of an understanding of the nature of mathematical proof and the improvement of the ability to reason. An introduction of the methods of coordinate geometry is also provided.

#### **Geometry Honors**

Grades 9, 10, 11

Major goals of this 2<sup>nd</sup> course in the accelerated series are the development of the nature of mathematical proofs and improvement in the ability to reason inductively and deductively. Transformation, coordinate geometry, geometric solids, and Non-Euclidean Geometries are studied in addition to the topics in the regular geometry course.

#### **Pre-Calculus**

*Grades* 11. 12 \*\*Dual Enrollment Course

This is an academic mathematics course for students planning to attend college. Functions, both continuous and discontinuous, as well as analytic geometry, vectors, complex numbers, and polar coordinates are studied. Among the topics to be studied are relations and functions, circular functions and their graphs, use of circular functions in area problems and the solution of triangles.

#### **Pre-Calculus Honors**

Grades 11, 12 **\*\*Dual Enrollment Course**  Full Year-5.0 Credits

**Full Year-5.0 Credits** 

Full Year-5.0 Credits

Full Year-5.0 Credits

This course is for students who plan to take calculus or a later college-level mathematics class. It includes topics in number patterns; sequences and series; equations and inequalities; functions and their graphs, inverses, and transformation; polynomial and rational functions; complex numbers; techniques in problem solving; exponential and logarithmic functions; triangular and circular trigonometry; trigonometric graphs; trigonometric equations; trigonometric identities and applications of trigonometry; polar coordinates; and limits and continuity.

#### Calculus

Full Year-5.0 Credits

Grade 12 \*\*Dual Enrollment Course

This course will allow the student the opportunity to evaluate and interpret limits, recognize and interpret continuous functions, find the derivative of a function, use differentiation of algebraic, trigonometric, exponential and logarithmic functions, use the applications of the derivative and integral, and sketch and find the area under a curve. The student will also use the Fundamental Theorem of Calculus and its applications toward word problems.

#### **Calculus Honors**

Full Year-5.0 Credits

**Full Year-5.0 Credits** 

Grade 12 \*\*Dual Enrollment Course

Prerequisite: Geometry A, Algebra 2A, Advanced Math A with at least an 85 average.

This course is designed to give the college bound student a first year college Calculus course. The course is developed using the Advanced Placement Course Description booklet published by the College Entrance Examination Board.

#### Supplemental Math

Grades 9, 10, 11, 12

This course is required of all students whose performance on the PARCC or other diagnostic test indicates a need for reinforcement and support in mathematics. This course is also required for all students who do not pass the PARCC. The subject matter includes numerical operations, measurement and geometry, patterns and relationships, data analysis and fundamentals of algebra, as well as conceptual understanding, integration of mathematical knowledge, procedural knowledge, communication and reasoning, and problem solving.

#### **AP Statistics**

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

- Exploring Data: Describing patterns and departures from patterns
- Sampling and Experimentation: Planning and conducting a study

- Anticipating Patterns: Exploring random phenomena using probability and simulation
- Statistical Inference: Estimating population parameters and testing hypotheses

Students who successfully complete the course and examination may receive credit and/or advanced placement for a one-semester introductory college statistics course.

#### **SAT/ACT Math Prep**

1/2 Year Course-2.5 Credits

Grade 11

This course is designed to augment other Math courses taken by preparing the student for taking the Math section of the SAT. This course must be taken in conjunction with SAT/ACT English Prep. The SAT/ACT Math Prep reviews and reinforces mathematical content learned in other math courses, as well as test-taking strategies and techniques. Sufficient practice is provided so that the students become comfortable with the formatting and timing of the test and the techniques required for improved performance.

# Musíc Department

#### Chorus

Grades 9, 10, 11, 12

This course is open to any student that is interested in learning the fundamentals of how to sing properly. Chorus is designated for students who participated in their middle school chorus and wish to continue signing as part of a choir ensemble. There is no prerequisite for this course. Instruction is individualized by voice part, while serving to supplement the full choir rehearsal. This is a performance-based class, incorporating performances into the student's assessment rom various events such as seasonal concerts, teen-arts the tree lighting, and graduation.

#### **Show Choir**

Grades 10, 11, 12

Full Year-5.0 Credits

Full Year-5.0 Credits

This course is open to any student that already has experience signing in a high school choir and would like to take their performance to the next level through choreographed movement. The prerequisite requires at least one year of choir plus the recommendation of the high school choir teacher. Instruction is individualized by voice part, while serving to supplement the full choir rehearsal. This is a performance-based class, incorporating performances into the student's assessment from various public events such as seasonal concerts, teen-arts, the tree-lighting, peprallies, and graduation.

#### **Intermediate Band**

Grades 9.10.11.12

This course is open to any student that is interested in continuing their studies on their chosen Concert Band specific instrument. The prerequisite requires at least one year of formal training on your instrument at the middle or high school level. Lessons are individualized based on the student's instrument and need, while serving to supplement the full band rehearsal. This is a performance-based class, incorporating performances into the student's assessment from various public events such as football games, seasonal concerts, parades, pep-rallies, and graduation.

#### **Advanced Band**

*Grades* 11,12

This course is open to any student that is interested in taking more advanced studies on their chosen Concert Band specific instrument. The prerequisite requires at least two years of Beginner or Intermediate Band Class plus the recommendation of the high school band teacher. Lessons are individualized based on the student's instrument and need, while serving to supplement the full band rehearsal. This is a performance-based class, incorporating performances into the student's assessment from various public events such as football games, seasonal concerts, parades, peprallies, and graduation.

#### **Freshman Chorus**

Grade 9

This course is open to any student that is interested in learning the fundamentals of how to sing properly. Chorus is designated for students who are interested in learning how to sing at the beginner level. It is open to beginner through intermediate singers and there is no prerequisite for this course. Instruction is individualized by voice part, while serving to supplement the full choir rehearsal. This is a performance-based class, incorporating performances into the student's assessment from various public events such as seasonal concerts, teen-arts, the tree-lighting, and graduation.

# Physical Education/ Health Department

**Physical Education** Grades 9, 10, 11, 12

The physical education program at Becton Regional High School is designed to develop and motivate the student's awareness of their physical abilities. Through a sequential and planned skill development program (9-12), the individual will develop efficient and effective movement, through games, skills, and dance, and realize the importance of physical fitness in terms of strength, endurance, and flexibility. The entire program is coeducational and required, but the

Full Year-5.0 Credits

Half Year-2.5 Credits

activity selection is elective. On the freshman and sophomore levels, team and dual sports are offered. Juniors and seniors also have the option to participate in team and dual sports; however, there are more dual and individual sports to choose from in their program.

#### **Health Education**

#### Full Year-5.0 Credits

Grades 9, 10, 11, 12

The health education program at Becton Regional High School is aimed at favorably influencing knowledge, attitudes, and practices relating to the individual, family and community. The program has been designed to take scientific facts and incorporate them into meaningful and understandable practices in order to develop habits for healthy living. In addition, preventive measures to maintain one's optimum mental and physical health are emphasized.

#### ✓ Personal and Community Health

Grade 9

• The 9<sup>th</sup> grade health program includes the systems of the human body, nutrition, major illnesses, smoking and substance abuse.

#### ✓ Driver Education

#### Grade 10

#### 30 Hours

 Classroom instruction will be offered to meet the 30 hour classroom requirement. Students' academic knowledge will be tested on the rules and regulations of driving and operating a motor vehicle.

#### ✓ First Aid

#### Grade 11

• A comprehensive First Aid course will be given to all 11<sup>th</sup> graders. The entire First Aid Manual will be covered along with CPR instruction.

#### ✓ Family Living

#### Grade 12

• The family has certain functions and purposes as a social institution in present day society which our youngsters should become aware of prior to the time that it becomes their responsibility. By making students aware of all the implications involved in maintaining the family as a social unit, they will be able to make the necessary contributions in this respect.

## Science Department

#### **Biology**

Grade 9, 10, 11, 12

This six-credit lab course consists of an in-depth study of cellular functions, genetics, evolution, and ecology, as well as plant and animal form and function. Students will learn to use scientific equipment such as microscopes and computers. Students should note that post-secondary institutions prefer that lab science courses are taken in high school.

#### **Biology Honors**

Full Year-5.0 Credits

#### Grades 9, 10, 11, 12 \*NCAA Approved Core-Course

This course is designed for college bound students intending to major in science, engineering, or any of the medical professions. This course is a recommended pre-requisite for the Advanced Placement Biology 2 course. The CP Bio 1A course consist of an in-depth study of the cell, plants, animals, biochemistry, molecular genetics and mans impact on our world. Students will be expected to conduct independent as well as team based research projects throughout the year. Extensive use of a variety of lab equipment and their safe use will supplement the program. Students in this accelerated course will be encouraged to go beyond what is done in the classroom and to become independent thinkers using the scientific method. For 9<sup>th</sup> grade selection a recommendation from an 8<sup>th</sup> grade science teacher is required.

#### **AP Biology**

Grade 11, 12 \*NCAA Approved Core-Course \*\*Dual Enrollment Course

Prerequisites: Biology Honors and Chemistry Honors with grades of 80 or above; Biology CP and Chemistry CP with a grade of 90 or above. Students who do not meet the above criteria must have the written permission of the Department Chairperson in order to take the course.

This course is designed to be the equivalent of a college introductory biology course usually taken during their freshman year. This course is designed for students intending to major in science, engineering, or a medical profession. The course consists of an in-depth study of basic biological chemistry, cells, energy transformations, genetics, evolution, heredity, biotechnology, principles of taxonomy and systematics, and ecology. Recommended laboratories will closely follow the College Board's syllabus with supplemental work both in and out of the classroom. Students will be expected to do extensive readings. All students are strongly encouraged to take the AP Biology exam in May.

Full Year -6.0 Credits

#### Full Year-5.0 Credits

#### Chemistry Grades 10, 11, 12 \*NCAA Approved Core-Course

#### Prerequisite: Biology with a grade of 75 or above and Algebra I with a grade of 75 or above. Students who do not meet the above criteria must have the written permission of the Department Chairperson in order to take the course.

This course is an introduction to basic chemical principles and concepts, such as matter and energy, atomic structure, the Periodic Table, chemical bonding, chemical reactions, mole concept, stoichiometry, chemistry of gases, aqueous solutions, acids and bases, and nuclear chemistry. Mathematical analysis and problem solving skills are emphasized throughout the year. Laboratory work, including written reports and the use of technology to gather and analyze data are an integral part of the course.

#### **Chemistry Honors**

Full Year-5.0 Credits

Grades 10, 11, 12 \*NCAA Approved Core-Course

Prerequisite: Algebra IA with a grade of 80 or above and Biology A with a grade of 80 or above, or Algebra I with a grade of 90 or above and Biology with a grade of 90 or above. Students who do not meet the above criteria must have the written permission of the Department Chairperson in order to take the course.

This course is a more in-depth introduction to basic chemical principles and concepts, such as matter and energy, atomic structure, the Periodic Table, chemical bonding, chemical reactions, mole concept, stoichiometry, chemistry of gases, aqueous solutions, acids and bases, and nuclear chemistry. Mathematical analysis and problem solving skills are heavily emphasized throughout the year. Laboratory work, including written reports and the use of technology to gather and analyze data are an integral part of the course. This course is recommended for students wishing to take Advanced Placement Chemistry.

#### **AP Chemistry**

Full Year-5.0 Credits

Grades 11, 12 \*NCAA Approved Core-Course \*\*Dual Enrollment Course

Prerequisite: Algebra I, Geometry Honors, and Algebra II Honors with an average of 80 or above, or Algebra I CP, Geometry CP, and Algebra II CP with an average of 90 or above. Chemistry Honors with an 80 or above, or Chemistry CP with a 90 or above. Students who do not meet the above criteria must have the written permission of the Department Chairperson in order to take the course. This course is designed to be the equivalent of a first-year college chemistry course for students who plan to major in science. Topics studied are: atomic theory and structure, bonding, reactions in solutions, gases, liquids and solids, thermodynamics, kinetics, equilibrium, acids and bases, electrochemistry, nuclear chemistry and descriptive chemistry. Students will use analytical and critical thinking skills to gain an understanding of chemistry and its impact on the world. Lab activities will develop problem-solving skills and analytical techniques used in scientific investigations. All students are strongly encouraged to take the AP Chemistry exam in May.

#### **Physics**

#### Full Year-5.0 Credits

### Grades 11, 12 \*NCAA Approved Core-Course

Prerequisite: Algebra I with a 75 and Geometry with 75. Students who do not meet the above criteria must have the written permission of the Department Chairperson in order to take the course.

This algebra-based course provides an introduction to physics topics including fundamentals of motion, dynamics, momentum, energy, torque, fluids, optics, light, electricity, and magnetism. A conceptual approach is reinforced by the use of mathematics and critical thinking skills. Laboratory experiments will be performed to enhance the instruction and provide students with real-world examples of the concepts being studied.

#### **AP Physics I: Algebra-Based**

Full Year-5.0 Credits

Grades 11, 12 \*NCAA Approved Core-Course \*\*Dual Enrollment Course

Prerequisite: Geometry Honors with an 80 or above, or Algebra I and Geometry with a 90 or above. Students who do not meet the above criteria must have the written permission of the Department Chairperson in order to take the course.

This course is an accelerated algebra-based introductory physics course. Topics covered include kinematics, dynamics, gravitation, simple harmonic motion, momentum, energy, rotation, electrostatics, circuits, mechanical waves and sound. Problem solving is an integral part of the course. Conceptual understanding is reinforced using interactive computer-based techniques, demonstrations, and laboratory experiences. All students are strongly encouraged to take the AP Physics I: Algebra-Based exam in May.

**AP Physics C: Mechanics** *Grade 12* 

\*NCAA Approved Core-Course

Prerequisite: AP Physics I: Algebra-Based with a grade of 80 or above. Co-Requisite: Advanced Math or Calculus. Students who do not meet the above criteria must have the written permission of the Department Chairperson in order to take the course.

This course is a Calculus based course involving more advanced topics in Physics. Topics include kinematics, Newton's Laws of Motion, work, energy, and power, systems of particles, linear momentum, circular motion, rotation, oscillations and gravitation. Problem solving and independent work are an integral part of the course. All students are strongly encouraged to take the AP Physics C exam in May.

Full Year-5.0 Credits

Earth & Space Science Grades 10, 11 \*NCAA Approved Core-Course

Prerequisite: Completion of Biology.

Earth & Space Science is a laboratory based course about the earth's surface and the forces that influence it, such as weather, climate, plate tectonics, the atmosphere, volcanoes and earthquakes. Topics also include information about geology, astronomy, and the exploration of space. Laboratory experiences involve learning through classroom simulations and exploration with geological tools.

#### **Marine Biology**

Grades 11, 12

### **Prerequisite:** Completion of Biology.

This elective course is an introduction to the world's oceans and to the inhabitants and processes contained within its vast boundaries. The course covers a brief history of marine biology, the sea floor and its topography, and the chemical and physical properties of the ocean such as sea water, ocean circulation, waves, and tides. Various marine species and communities will also be studied. Laboratory exercises and computer simulations will be used to enhance instruction.

#### **Environmental Science**

Grades 10, 11, 12

### **Prerequisite: Completion of Biology**

This elective course is designed for students who are interested in environmental issues relevant to today's world. Students will identify and analyze environmental problems, evaluate risks associated with these problems, and examine alternative solutions. Topics covered include the biomes of the world, global cycles involving weather, climate, and rock, population growth rates, competition between species, predation, food chains, and food webs, and human impacts to the planet.

Full Year-5.0 Credits

#### **Physics of Engineering**

Grades 10, 11, 12 \*NCAA Approved Core-Course

Physics of Engineering & Design is an exploratory science course that will introduce students to basic and introductory concepts of physics such as motion, forces, stress, strain, energy, momentum, torque and electricity and their real world connections within career fields such as engineering and design. Science career fields that will be explored will include, but not be limited to, aeronautical, mechanical, civil, electrical, structural, & bio-medical engineering. Concepts will be introduced through exciting hands-on inquiry based lessons and projects that will build students' critical thinking, problem finding and problem solving skills.

#### Anatomy & Physiology

Grades 11, 12 \*NCAA Approved Core-Course \*\*Dual Enrollment Course

#### Prerequisite: Completion of Biology & Chemistry

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Anatomy and Physiology is a full year lab science that focuses on the study of the systems, functions, and structure of the human body. Students will be exposed to an in depth study of the organized functions of the human body at the cellular, tissue, organ, and system level. Students will participate in various hands-on inquiry-based activities throughout the year. Anatomy & Physiology is recommended for all students interested in receiving an in depth study of the human body and highly recommended for students interested in a possible career within the medical field.

#### **Forensics**

#### Grades 10, 11, 12 \*NCAA Approved Core-Course

Forensics is a general introduction to the biological, chemical and physical science principles and technological practices in the study of criminal and civil issues. Major themes of study in this course are pathology, anthropology, ballistics, trace evidence, biological fluids, DNA, fingerprints, impression evidence, questioned documents and forensic psychiatry/psychology. Hands-on lab experiments and inquiry-based lessons reinforce the scientific process. This course serves to familiarize those individuals with an interest in criminal justice or related fields with the methods and techniques currently employed by forensic scientists so that students have a working knowledge and understanding of the technical world of forensic science. Emphasis will be placed on the methods that link suspect, victim, and crime scene. Case studies and current events will also be explored. Successful completion of a unit will be based on the demonstration of mastery of the core curriculum standards.

#### Full Year-5.0 Credits

Full Year-5.0 Credits

# Socíal Studíes Department

#### **World History**

Grade 9

#### \*NCAA Approved Core-Course

World History is the first of the three state-mandated offerings in history at Becton Regional High School. World History, as a first-year survey course, will strive to serve students of all abilities and interests. The course is divided into three segments. The first, The Ancient World, explores the foundations of our world's civilizations. The second, Major World Cultures, seeks to infuse current trends and enthusiasm for multiculturalism, with a practical assessment of the undeniable contributions of these cultures to our modern world. Finally, Modern European History lays the groundwork for the transition to United States history with an overview of the development of the modern European nation state through the Enlightenment.

#### **AP World History: Modern**

Grade 9

#### \*NCAA Approved Core-Course

In AP World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. AP World History: Modern is designed to be the equivalent of an introductory college or university survey of modern world history.

#### U.S. History 1

Grades 10, 11

#### \*NCAA Approved Core-Course

This is a required course covering American History from the age of discovery to the period of America's emergence as world power -1877. Through a comprehensive review of the economic, social, political, military, and literary activities of a growing nation, this survey stresses the dynamic character of the American scene. By chronicling the American past and developing a link between then and now, the student is made aware that the history of the United States represents a triumph in human achievement.

#### AP U.S. History 1

Grades 10, 11 \*NCAA Approved Core-Course

Prerequisite: The student must have taken World History and Cultures and completed the course with a minimum grade of 88.

This is a college level course covering American History from the age of Discovery to post-Civil War American Industrial Revolution. This course will be presented as a comprehensive review of the political, economic, social, military, and intellectual activities of a growing and developing

Full Year-5.0 Credits

Full Year-5.0 Credits

Full Year-5.0 Credits

nation. This course is part of a program constituted for preparing students for taking the College Entrance Examination Board's Advanced Placement Test.

#### U.S. History 2

Full Year-5.0 Credits

Grades 11, 12

#### \*NCAA Approved Core-Course

This is a required course covering the period from 1877 to the end of World War II in 1945 with particular emphasis on the economic, political, and social factors which have shaped and influenced modern America. Knowledge, awareness, and appreciation of current, domestic, and foreign policy concepts are fully and systematically developed through the use of problem solving and inquiry techniques. Also incorporated into the course are sections on income tax preparation and the practical aspects of the law.

#### AP U.S. History 2

Full Year-5.0 Credits

Grades 11, 12 \*NCAA Approved Core-Course \*\*Dual Enrollment Course Prerequisite: The student must have taken U.S. History 1 AP and completed the course with a minimum grade of 88.

NREGION

This is a college level course covering American History from the Industrial Revolution to post Vietnam Conflict era. This course is a program constituted for preparing a student for taking the College Entrance Examination Board's Advanced Placement Test. The course will be presented as a comprehensive review of the political, economic, social, military and intellectual activities of a growing nation. Students will take the U.S. History AP exam in May.

#### **AP U.S. Government and Politics**

Full Year-5.0 Credits

<sup>1</sup>/<sub>2</sub> Year Course-2.5 Credits

Grades 11, 12 \*\*Dual Enrollment Course

Prerequisite: Completion of United States History 1 and 2 with a cumulative grade of no less than 85.

The course is designed to instill a deeper understanding and appreciation for our system of government and the documents that created it. The course is also intended to prepare students in the course for success on the AP United States Government and Politics exam administered each May by College Board.

#### Civics

Grades 11, 12

This course is structured for an in depth study of our democratic society to give the student an understanding and appreciation of the nature of their society in terms of its traditions, goals, and ideals, its limitations and strengths, its method of operation and the boundaries of reasonable choice in their nation and the world of which they are part. In the course, the constitutions of the

federal and state governments will be analyzed, the structure and operation of the federal, state, county and local governments will be studied along with out political system.

History of New Jersey

1/2 Year Course-2.5 Credits

Grades 11, 12

Course objectives include the basic political, economic, social and intellectual forces that have shaped New Jersey. Those taking this course will seek to define New Jersey's role within the context of United States history in light of the state and the nation's origin and development. Students will investigate the important events, personalities and issues of New Jersey history and make the necessary connections between people, places and events that led to major crises or conflicts that shaped New Jersey history.

ON REGIONAL

#### The Holocaust

Grades 11, 12

#### \*NCAA Approved Core-Course

This course is intended to present students with three different perspectives on the Holocaust. The first is to give students the historical view of the Holocaust, including anti-Semitism (past and present) and a survey of the years 1933-1945. This will focus on anti-Semitic laws of the Nazi government, deportations and the killing process. This will be viewed as a legalized program by the Nazi government to eliminate all Jews from Europe. The second is to offer the theological dimension of the Holocaust, specifically through the writings of Jewish and Christian authors on moral issues and reactions of the Christian Churches during and after the Holocaust. The third is personal and subjective. Students will be expected to react to the events of the Holocaust through videos, guest speakers and a field trip to the Holocaust Museum in Washington, DC.

#### Sociology

Grades 11, 12

#### \*NCAA Approved Core-Course

This course is intended for students who wish to develop a better perspective about society. By developing a sociological outlook in relation to themselves and their environment, students can learn to live more effective lives as part of their social world. Specific areas to be studied are the history of sociology, the dynamics of group process and influence of mass media, basic problems confronting our society, the measuring of culture, normal and defiant behavior, and the operation of the political, economic and religious institutions. This is a course which allows for self expression and awareness of other in terms of the sociological problems which may relate to the individual or society as a whole.

Modern America: Post WWII Grades 11, 12

Modern America will explore the development of the United States from post-World War II (1945) to the present. This course begins with the US in a world leadership role with the creation of the United Nations and continues through such topics as the Cold War, Korean War, McCarthyism and US involvement in the Vietnam War. The course will investigate the reforms

Full Year-5.0 Credits

# <sup>1</sup>/<sub>2</sub> Year Course-2.5 Credits

<sup>1</sup>/<sub>2</sub> Year Course-2.5 Credits

of the 1960s (Warren Court, the Civil Rights movement, the Women's Rights movement, the Anti-War movement, the Environmental movement), the Watergate scandal and the US withdrawal from Vietnam.

Modern America will survey the emergence of the Modern Conservative movement, the Reagan Administration, the end of the Cold War and the emergence of the US as a key diplomatic player in the Middle East, Yugoslavia and Northern Ireland. The course will examine the profound changes in American popular culture brought about by the high technology revolution. Finally, Modern America will consider America's role in the post-September 11 world.

#### **Economics**

Half Year Course- 2.5 Credits

# *Grades 9*, *10*, *11*, *12*

\*NCAA Approved Core-Course

This course is structured to present the student with a capsule study of the field of economics, with emphasis on concepts and individual decision making. The economic forces and influences that contribute to the behavior and development of responsible adults as producers and consumers of goods and services form part of this broad study. Some specific topics included in the course are the fiscal policies of the federal government, world economic systems, personal and family economic problems, structure of private business and international trade.

#### **Introduction to Criminal Justice**

Half Year Course- 2.5 Credits

Grades 10,11,12

#### \*NCAA Approved Core-Course

This course is designed for students to develop a foundational knowledge of the criminal justice system through different perspectives. This course will provide understanding of historical developments and current practices in criminal law, we well as correctional practices, in the United States today.

#### Law: Rights & Responsibilities

Grades 10, 11, 12 \*NCAA Approved Core-Course

This course provides an understanding of how laws are created, enforced, interpreted, and changed. The course examines criminal, civil, constitutional, and international law, and explores civil rights issues, and the role of advocacy, in the U.S. legal system.

# World Language Department

#### Italian 1

Grades 9, 10, 11, 12

#### \*NCAA Approved Core-Course

Instruction in this introductory course focuses on developing proficiency in the four basic areas of communication—listening, speaking, reading and writing. Throughout the academic year,

Half Year Course- 2.5 Credits

students increase their vocabulary and learn the basic grammatical structures of the Italian language. Instructional activities also emphasize conversation and understanding of the spoken language. Students are exposed to the rich culture and varied customs of Italy as well. Computer technology is utilized on a daily basis throughout the school year.

#### Italian 2

Grades 10, 11, 12 \*NCAA Approved Core-Course

#### **Prerequisite: Italian 1**

This course continues to develop proficiency in the four basic areas of communication—listening, speaking, reading and writing. Students expand their working vocabulary and increase their knowledge of grammatical structures in the target language. Learning activities include increased reading and writing assignments, and conversational skills are further developed and emphasized. Students continue to explore Italy's cultural heritage throughout the school year. Computer technology is utilized on a daily basis throughout the school year.

#### Italian 3

Grades 11, 12

#### Prerequisite: Italian 1 & 2

In this course students continue to learn more advanced vocabulary and more complex sentence structure and are expected to write longer compositions and even some poetry. Many opportunities are provided to develop conversational and listening skills to a further extent and to increase students' knowledge of Italy's rich cultural heritage, its contributions to the arts and sciences both in the past as well as the present. Reading selections include short stories, poetry, and articles from Italian newspapers and magazines. Computer technology, a tool for learning, is utilized as well throughout the school year. At least one field trip is arranged to enable students to experience some aspect of the Italian culture.

#### **Italian 4 Honors**

Grade 12

#### Prerequisite: Italian 1, 2 & 3

Full Year-5.0 Credits

#### \*\*Dual Enrollment Course

In Italian 4 Honors students continue to develop a wider vocabulary and increase their fluency in all four basic areas of communication. Students are expected to speak the target language extensively in class. The cultural study includes Italian history, art, literature and contemporary "computer slang". Students will be engaged in a variety of activities to foster a better understanding of the language and culture. At least one field trip is arranged to enable students to experience some aspect of the Italian culture. Computer technology is utilized on a daily basis throughout the school year.

Full Year-5.0 Credits

#### Full Year-5.0 Credits

#### Spanish 1 Grades 9, 10, 11, 12 \*NCAA Approved Core-Course

Instruction in this introductory course focuses on developing proficiency in the four basic areas of communication—listening, speaking, reading and writing. Throughout the academic year, students increase their vocabulary and learn the basic grammatical structures of the Spanish language. Instructional activities also emphasize conversation and the understanding of the spoken language. Students are introduced to the culture and customs of the Spanish speaking world through direct instruction as well as various projects. Computer technology as a tool for learning is utilized, bringing the learning process into the twenty-first century.

#### Spanish 2

Grades 10, 11, 12 \*NCAA Approved Core-Course

**Prerequisite:** Spanish 1

This course continues to develop proficiency in the four basic areas of communication—listening, speaking, reading and writing. Students expand their working vocabulary in the target language and increase their knowledge of grammatical structures. Instructional activities also emphasize conversation and understanding of the spoken language. In addition, students continue to learn about the culture and customs of the Spanish speaking world through the creation of Day of the Dead projects, travel brochures and participation in Cultural Events. Students continue to use computer technology as a tool for learning.

#### Spanish 3

Grades 11, 12

#### Prerequisite: Spanish 1 & 2

In this course students continue to learn more advanced vocabulary and more complex sentence structure and are expected to write poetry in the target language as well as longer compositions. Many opportunities are also provided to develop conversational and listening skills to a fuller extent. At least one field trip is arranged to enable students to experience some aspect of Spanish culture. Students will strengthen the use of computer technology in the World Language classroom.

#### **Spanish 4 Honors**

Grade 12

#### Prerequisite: Spanish 1, 2 & 3

#### **\*\*Dual Enrollment Course**

In Spanish 4 Honors students continue to develop a wider vocabulary and increase their fluency in all four basic areas of communication. Students are expected to speak the target language extensively in class. The cultural study includes Spanish history, art, literature and current events. Students will be engaged in a variety of activities to foster a better understanding of the language and culture. At least one field trip is arranged to enable students to experience some aspect of the Spanish culture. Computer technology is utilized on a daily basis throughout the school year.

Full Year-5.0 Credits

Full Year-5.0 Credits

# Vírtual Hígh School

The Virtual High School (VHS) is a consortium of schools worldwide which offers asynchronous courses which run on a weekly basis.

Via the internet, Becton Regional High School has been a participating school since 2008. VHS helps schools expand their coure offerings including their electives and AP courses. VHS offers high school core, elective, Advaned Placement and credit recovery courses.

The Virtual High School is accredited by both Middle States Assosciation Commission on Elementary and Secondary Schools (MSA-CESS), and <u>AdvancED</u>. Students can visit <u>the course catalog</u> available at govhs.org to view the variety of ourses offered including approximately 23 <u>Advanced Placement</u> courses. VHS provides students with callaborative and engaging learning opportunities.

VHS Website: <u>https://vhslearning.org/</u>

Course Catalog Link: https://my.vhslearning.org/PublicStudentCourseList.aspx

VHS Advanced Placement Courses: https://vhslearning.org/advanced-placement