

Center Moriches High School
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Dear Student,

The goal of the faculty and administration of Center Moriches High School is to provide you with an education that encourages and develops social and emotional growth, critical thought, analytical problem solving, leadership, and citizenship. Education is a life-long process, and we believe that in order to prepare you to meet the demands of a rapidly changing world, course offerings need to be rigorous, challenging, and relevant.

The depth and breadth of our course offerings allow each student to individualize his/her academic program and chart a course for future success. We recommend that you take the time to carefully read the course descriptions and that you actively seek the advice and guidance of your parents, teachers, administrators, and counselors. Ask questions! Our faculty and staff are eager to help you make your course decisions.

Success comes to those who plan and prepare. Use this course offerings catalog as a catalyst for future success.

Yours truly,

Edward William Casswell

Edward William Casswell
Principal

Center Moriches High School Course Offerings Catalog 2020-2021

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GRADUATION REQUIREMENTS OVERVIEW

New York State High School Diploma: The faculty at Center Moriches High School is committed to offering its students rigorous and enriching course offerings. In order to most effectively prepare for future college and career choices, the following diploma options can be achieved by taking and passing the following courses and assessments:

Requirements for Graduation

<u>Course</u>	<u>Credits</u>
English	4
Social Studies	4
Math	3
Science	3
Health	½
Art/Music	1
Electives	3 ½
Physical Education	2
LOTE (Languages other than English)	1
Total Units	22

Traditional Diploma Pathways

Regents Diploma (5 Regents Exams)

English Language Arts

Algebra I

Global History

U.S. History

Science (Lab)

Advanced Designation Regents Diploma (8 Regents Exams)

English Language Arts

Algebra I

Geometry

Algebra II

Global History

U.S. History

Science (Lab)

Science (Lab)

Comprehensive Language

(or earn a 5 unit sequence in Art, Music or Occupational Education)

***a passing score on a second
Math or Science exam may substitute
for the Global History or U.S. History exam

For additional information on graduation pathways:
<http://www.nysed.gov/curriculum-instruction/multiple-pathways>

***We encourage all students to stretch beyond their self-perceived limitations and attempt to achieve the most rigorous diploma option possible. The most rigorous diploma option offered by New York State is the Advanced Designation Regents Diploma.

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SCHEDULING/COURSE CHANGES:

It is critical that the student and parent read and adhere to the following time schedule. The courses to be offered during the school year are based on student selections. However, the courses in the catalog are listed on a tentative basis. Some courses may not be offered in 2019-2020 because they fail to meet minimum enrollment requirements. Students should make very careful and well-thought-out decisions and to select alternate courses when designing your schedule.

Scheduling Calendar

January	Presentation of Course Offering Booklet Counselors to meet with students (and parents as needed) to select courses for 2019-2020
January/February	Counselors to finalize course selections with students
March	Course selections received by parents
April/May	Counselors to resolve scheduling conflicts with students and notify parents of any changes concerning course selections
June	Scheduling decisions are considered final at this point

** The course selections that you make in January/February will be your program for the next school year. Schedule changes will be made in September **only if** a clerical error was made, a student failed a course requirement for placement in an advanced course or special situations as determined by the building Principal.

WITHDRAWAL FROM A COURSE

It is expected that any student enrolling in a course will remain for its duration. There are exceptions, but even in these instances, a student will not be allowed to drop a course after the DROP/ADD period has elapsed (which is two weeks/10 school days after the beginning of the school year). A student wishing to drop a course must consult with their parents, counselor, teacher and principal. The Principal will have the final say on any request to drop a course. The Principal may issue a withdraw/fail-W/F at his/her discretion, or upon the recommendation of the classroom teacher. As a result of a withdraw/fail- W/F, a student will receive a grade of 50%. No student is dropped from class until official notification from guidance or the Principal is given to the classroom teacher. The student's request to drop a class or change a program is merely a request and not official until the Principal has made the decision.

GRADE WEIGHTING, CLASS RANK AND VALEDICTORIAN DETERMINATION

The Center Moriches Board of Education recognizes that some academic programs are more rigorous and challenging than others. The Grade Weighting protocol recognizes that reality, and rewards students for taking more challenging and rigorous courses of study.

GRADE WEIGHTING

Grades are weighted on a scale as follows:

- International Baccalaureate and Advanced Placement courses multiplied by a factor of 1.1
- Honors courses and Concurrent College courses multiplied by a factor of 1.05

GRADE POINT AVERAGE

Student grade point averages are determined at the end of each semester except as noted for Valedictorian and Salutatorian (see below), based upon the aforementioned Grade Weighting protocol. Academic averages reported to colleges on student transcripts remain unweighted.

VALEDICTORIAN/SALUTATORIAN DETERMINATION

The Valedictorian and Salutatorian for graduating students will be calculated and rank ordered at the end of the third quarter of the year in which the class graduates. Such determination is final and no adjustments thereafter will take place. In order to be eligible for valedictorian or salutatorian a graduating senior must have spent four (4) consecutive semesters total at Center Moriches High School.

ATTENDANCE PROCEDURE:

Students must attend each class a minimum of 85% of the time.

Full-Year Course – the minimum attendance is 85% or 153 days per year. Therefore, a student may be absent no more than 27 days. A student will be in violation on the 28th absence.

Half-Year Course and Physical Education Class – the minimum attendance is 85% or 77 days. A student will be in violation on the 14th absence.

Lab Science Course – the minimum attendance is 85% or 229 periods. A student will be in violation on the 41st absence.

If credit is denied, a student will receive a C/D for the specific course and must attend classes regularly and maintain proper behavior. The student is still entitled to participate in examinations. Failure to continue to attend class on a regular basis and maintain appropriate behavior will result in disciplinary action and may result in the student being removed from the class.

Summer School Eligibility Requirement – A student who fails to continue to attend classes on a regular basis will not be eligible to attend summer school. *Summer school requires seat time.*

COLLEGE LEVEL COURSES

International Baccalaureate (IB) Diploma Program

The International Baccalaureate Program is a two year study that awards a pre-college diploma to students who complete all of the requirements and perform successfully on the six external examinations. Students may earn college credit and advanced standing at colleges and universities throughout the world. The two year curriculum is rigorous, challenging and encourages students to think critically through the study of a wide range of subjects. Beyond completing college-level courses and examinations, Diploma Program students are also required to engage in community service (CAS: Creativity, Activity, Service), individual research (EE: Extended Essay), and a philosophy course (TOK: Theory of Knowledge).

***TOK will be multiplied by a factor of 1.1 (weighted grade)

Refer to the **Center Moriches International Baccalaureate Program Guide** for detailed information.

College Board Advanced Placement (AP)

Advanced Placement courses are offered in various content areas throughout the curriculum. They give students the opportunity to earn credit or advanced standing at many of the nation's colleges and universities. Courses are designed to give students a head start in college-level work and develop the study habits necessary to succeed in rigorous course work. In order to receive credit in an AP course, the AP exam, administered by the College Board, must be taken.

College Courses: Concurrent Enrollment

College level courses taught in the high school offer students the opportunity to earn both high school credit and college credits simultaneously. College credits earned through a concurrent enrollment program may be ultimately transferred to other college/universities where the student may matriculate pending the evaluation/policy of the receiving college/university. ***Students are responsible for fees associated with said courses. See specific course instructor for fee schedule. Concurrent enrollment courses are available in conjunction with the following institution:

Suffolk Community College (BEACON Program)

SUNY Farmingdale University in the High School

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SPECIAL EDUCATION DEPARTMENT

The special education programs are for students who are identified by the Committee on Special Education (CSE) as having specific learning problems requiring specialized teaching techniques. The objectives of the programs are:

- Remediate specific deficit areas through multi-sensory sequential techniques.
- Provide a secure, low pressure, success-oriented environment where each student can learn at his/her own pace.
- Build organized, self-initiated work habits and improve behavior.
- Develop students' increased self-confidence through awareness and acceptance of individual strengths and weaknesses.
- Help classroom teachers understand individual disabilities and assist them in utilizing effective methods of teaching each student in his/her class.

THE SPECIAL EDUCATION STUDENT:

Services: Students with learning difficulties, who are classified by the Committee for Special Education (CSE), have access to the full range of programs and services appropriate to their specific needs. The CSE will consider what instructional techniques and modifications are being provided during the annual review process so that the appropriate recommendations for changes and revisions can be made. **Special Note:** Students seeking an Advanced Designation Regents diploma who pursue a 5-credit sequence in art, music, or occupational education may be exempt from the foreign language requirement. Students identified as handicapped may be exempt from the foreign language requirement for a Regents diploma if the I.E.P. states the requirement is not appropriate.

Special Education Safety Net: To earn a Regents diploma, students must take and pass the required course work and five required Regents examinations with grades of 65 or higher (English, Math, Global History, U.S. History and Government and Science). Students with disabilities can earn a local diploma by satisfying any one of two options:

1. Achieve a 55-64 score: The student obtains only a score of 55-64 on one or more of the required Regents examinations.
2. Compensate for a 45-54 score: A student that scores at least a 55 on the English and Math Regents examinations can compensate a score of 45-54 on any other Regents exam with a score of 65 or higher on separate Regents examinations, and meets additional school attendance and course grade requirements.

COMMUNITY SERVICE AND INVOLVEMENT PROGRAM (CSIP):

CSIP is a graduation requirement for all students. Students are required to accumulate a minimum total of 40 units/points during their four years of high school. Students in grades 9, 10, 11 and 12 must complete a minimum of 10 units/points per year.

ART

Studio Art

Level of Student: Grades 9-12

No. of Credits: 1

Prerequisite: None

This course will acquaint students with basic art procedures and materials as they apply to the field of art. The student will learn about art as a creative experience, a means of expression, a medium of communication and a source of beauty. This is the foundation course for all advanced work in art. Studio in Art satisfies the N.Y.S. requirement for one year of fine arts at the high school level and is a prerequisite for a five-unit sequence in art.

Drawing & Painting I

Level of Student: Grades 10-12

No. of Credits: ½

Prerequisite: Successful completion of Studio Art

This course concentrates on all aspects of drawing and rendering using various media including pencil, charcoal, and ink. Focus is on color application and watercolor, acrylic and tempera painting techniques. Students examine classical and contemporary painting styles and become aware of the artist's role in the modern world.

Drawing & Painting II

Level of Student: Grades 10-12

No. of Credits: ½

Prerequisite: Successful completion of Drawing & Painting I

This is an advanced studio class for students who already have a firm background in color theory, technique, and experience in the following media: watercolor, acrylic paints, pastels, charcoal, and pencil rendering. Painting as expression and communication is emphasized as students create original works based on life studies and self-created images. Historic styles are explored and discussed, including work of Realists, Expressionists, Impressionists, Surrealists, and Abstract Expressionists. Focus is on painting as a social, philosophical, and emotional statement.

Ceramics & Sculpture I

Level of Student: Grades 10-12

No. of Credits: ½

Prerequisite: Successful completion of Studio Art

This course is designed to introduce the student to a variety of hand building techniques as well as three dimensional art. Areas of study include pinch, coil and slab construction. Students will recycle clay, make slip and learn additive and subtractive techniques. Students will create three-dimensional forms from varied materials including clay, plaster of paris, paper, wire, wood, and found objects. Basic glazing and decorating techniques will be explored.

Ceramics & Sculpture II

Level of Student: Grades 10-12

No. of Credits: ½

Prerequisite: Successful completion of Ceramics & Sculpture I

Students will create functional pottery as well as the human head and face. An introduction to the potter's wheel will include centering, raising a form and trimming. Projects are more detail orientated. Students will create projects from a variety of sculptural materials as well as extend their skill on the potter's wheel. They will produce functional and sculptural ceramics while experimenting and exploring with surface details.

Advanced Placement Studio Art (Drawing & Painting/2D and 3D Design)

Level of Student: Grade 12

No. of Credits: 1

Prerequisite: Portfolio Preparation, teacher recommendation and/or administrative approval

This course is designed as a follow-up to the Portfolio Preparation art course. Students are expected to complete portfolios for evaluation by a group of artists and teachers and the work will be evaluated periodically throughout the year. The portfolio represents the final grade and is judged according to quality, concentration and breadth. All students are required to submit the portfolio for review by a committee by the College Board for Advanced Placement credit.

IB Visual Arts I and II HL/SL

Level of Student: Open to grade 11 students

No. of Credits: 1

Prerequisite: Studio in Art plus any one advanced course (Drawing and Painting, Ceramics and Sculpture etc.)

This course is designed to assure that students will develop an intensely personal view of the world of art through an artistic journey. Aesthetic, imaginative, and creative skills will be developed through the study of art history and the skills necessary to formulate visual statements. A research notebook will be maintained to demonstrate knowledge and visual phenomena. Regular research and studio work will provide the link between personal research and the interrelationship with studio work.

Creative Crafts I and II

Level of Student: 10-12

No. of Credits: ½

Prerequisite: None

Students will explore various craft areas including pottery, jewelry making, bookbinding, and fiber arts. Students will participate in a series of activities based on craft techniques from different cultures and periods of time. This course will include an in-depth exploration of the Art Elements and Principles of Design as they relate to craft making.

Digital Photography/Digital Photography II

Level of Student: 10-12

No. of Credits: 1

Prerequisites: None

This course introduces industry standard (DSLR) digital cameras and professional software (Adobe Photoshop) to high school students. Learners will engage with both fundamental and advanced techniques to explore digital photography as an artistic and technical medium. Students will be provided with a combination of mechanical content, informative demonstrations, basic graphic design, field trips and exploratory exercises to interpret and demonstrate proficiency when operating digital cameras.

Mindfulness in the Creative Studio

Level of Student: 10-12

No. of Credits: 1

Prerequisites: None

The mantra of this class is that practicing mindfulness promotes well-being. Class objectives include the stimulation of creativity, providing access to creative materials, developing practices that support thinking and memory, helping to lower levels of stress and the enhancement of each day through mindfulness and wellness techniques.

Art in Film, Music and Media

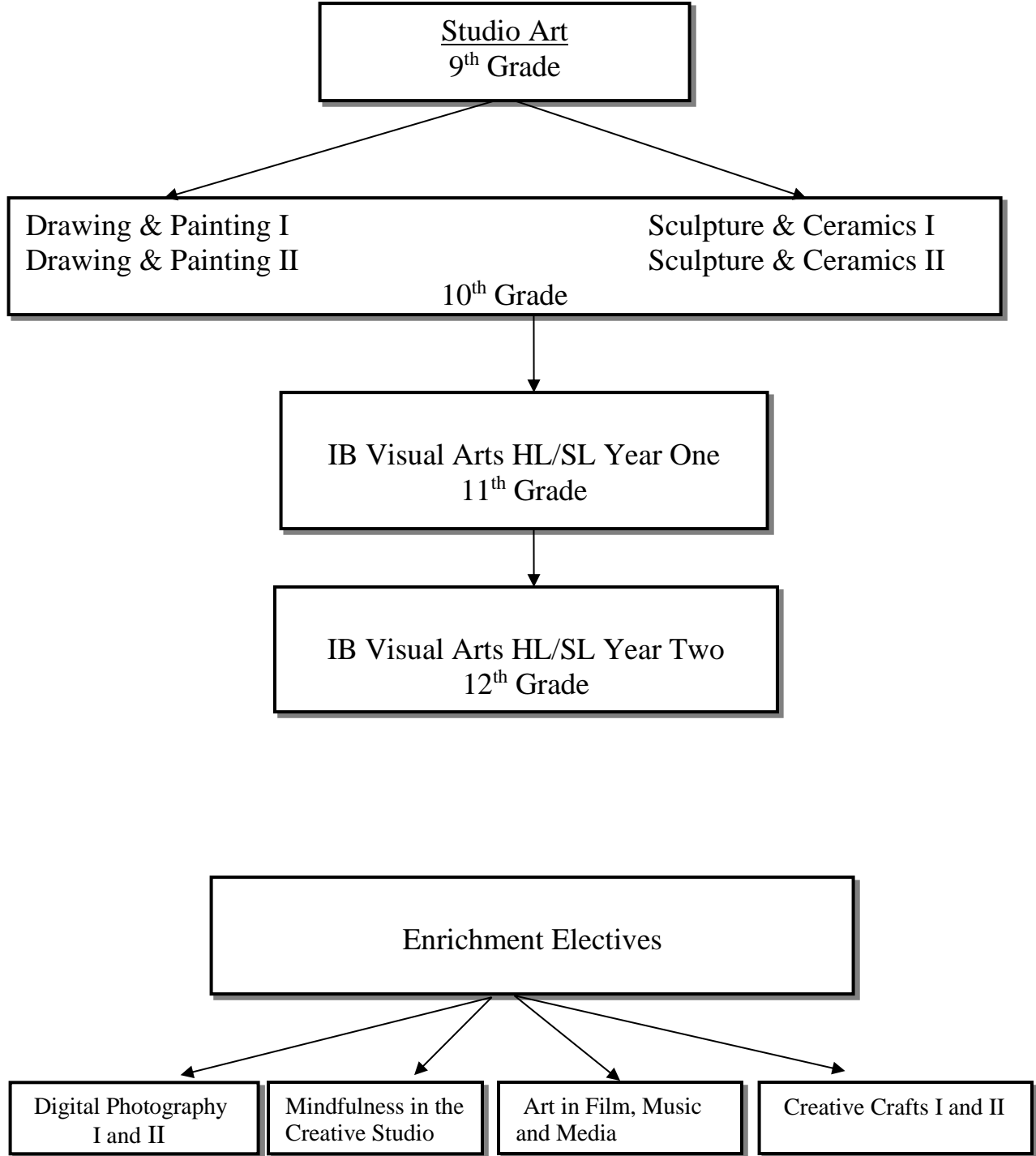
Level of Student: 10-12

No. of Credits: 1

Prerequisites: None

This class will explore how Art is an important and necessary element in all forms of film, music and media. Students will view various genres of movies, listen to a variety of music and discover how Art plays a role in media advertisements and publicity. Students will have the opportunity to share their favorite films and ads while learning how Art impacts the success of these everyday art forms. Students will create character sketches, advertisements and logo designs while analyzing the impact of mass media on our society.

Art



***** A five credit sequence can be utilized as a requirement for the Advanced Designation, Regents Diploma. See your counselor for details.**

BUSINESS

Career & Financial Management (Business 101)

Level of Student: Grades 9-12

No. of Credits: 1

Prerequisite: None

This course will help students develop skills and strategies to communicate successfully in the corporate/business world. Students will discover the exciting world of business and what it can offer. Students will learn about different segments of business activities such as management, marketing, economics, human relations, career decision making and today's financial investment strategies. *This is a concurrent college course offered through Suffolk Community College's BEACON Program. College credit is only for juniors and seniors.* **This course is a requirement for all occupational education sequences.**

Computer Applications I and II

Level of Student: Grades 9-12

No. of Credits: ½

Prerequisite: Career & Financial Management or teacher recommendation and/or administrative approval

This course will focus on software programs needed in high school, college, and business/industry and beyond. The curriculum includes the development of Microsoft Office skills, introduction to Windows Movie Maker and Photo Story. This is a project generated course, where students will use Microsoft Office (Word, Excel, Access, and Power Point), and learn the basics of word processing, spreadsheets, databases, and computerized presentations. **This course is required for business education sequences.**

Accounting (ACC 101)

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: None

Accounting is the "language of business" and is a necessary stepping-stone for all that are interested in pursuing business careers. This course stresses the principles and procedures needed to build a solid foundation in accounting principles in order for students to become thinkers, decision makers and problem solvers and not merely recorders of information. Accounting software applications will be utilized in this course to provide "real-life applications." *This is a concurrent college course offered through Suffolk Community College's BEACON Program.*

Sports Marketing

Level of Student: Grades 11-12

No. of Credits: 1

Prerequisite: None

Would you like to be part of one of the fastest growing college majors and one of the most exciting and lucrative industries of the future? This course is designed for students with an interest in the sports industry and its related careers. Basic marketing principles will be studied and applied through projects and in Internet simulations. Students will actively apply their skills promoting athletic events within the school community.

Business Law

Level of Student: Grades 11-12

No. of Credits: ½

Prerequisite: None

This course is designed to have students learn and apply the fundamental principles behind law that involves an individual's personal and professional life. This course will explore legal issues such as personal, consumer, employment, property, corporate and contract law. This course is vital for the future business major as well as for the consumer in general. Interactive projects and guest speakers will enhance the classroom experience and provide students with authentic experiences.

Sports Management

Level of Student: Grades 11-12

No. of Credits: ½

Prerequisite: None

Students will learn how professional athletic teams are owned and operated within today's dynamic sports business world. Management principles will be used to explore this exciting industry and focus on topics such as collective bargaining, contracts, human resources, sports law, public and media relations. Interactive team projects and guest speakers will enhance the classroom experience and provide students with authentic experiences.

Virtual Enterprises

Level of Student: Grades 11-12

No. of Credits: 1

Prerequisite: None

Virtual Enterprises International is an in-school entrepreneurship program and global business simulation. This is a student-centered course in which the teacher serves as a facilitator and students develop a simulated business to compete with other high schools throughout the world in the online Virtual Enterprises marketplace. The simulated business will replicate all of the functions and demands of a real business in structure and practice, product development, production, distribution, marketing, sales, human resources, finance and accounting. As "employees" of the virtual business, students are accountable for their company's management and performance. Through a web-based banking system that connects over 5,000 student-run businesses in 40 countries, VEI students experience the expectations of the global economy and find new solutions to drive business results by trading across industries, borders and cultures. Students may take this course for two consecutive years; in both their junior and senior years. *This is a concurrent college course offered through Farmingdale State College SUNY. Students can earn up to 8 college credits.*

E-Sports

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: None

Play video games? Would you like to go to college and get recruited to play those games? This course will prepare you for this process! Games such as Fortnite, Rainbow 6, Rocket League and Supersmash are among the leaders in recruited games by over 150+ colleges. Demonstrate your skills as you compete against schools across the nation while learning how professional gamers stay on top of their game!

Small Business Management

Level of Student: Grades 10-12

No. of Credits: ½

Prerequisite: None

This course focuses on the skills needed to begin and operate a small business. Included in this class important information about the concept of small businesses, essential management skills, authentic preparation of a business plan and model, understanding financial statements, marketing strategies, legal strategies and accounting issues.

Business

Career and Financial Management

AND

Computer Applications I + II

Accounting & Finance Cluster

Accounting
Sports Marketing
Virtual Enterprises
Business Law
Sports Management

Enrichment Electives

E-Sports
Small Business Management

***** A five credit sequence can be utilized as a requirement for the Advanced Designation, Regents Diploma. See your counselor for details.**

ENGLISH

English 9

Level of Student: Grade 9

No. of Credits: 1

Prerequisite: Successful completion of English 8

This course is an overview of rhetorical strategies and composition. Students will explore several genres including mythology (*The Epic of Gilgamesh, The Iliad, The Odyssey*), drama (*West Side Story, The Tragedy of Romeo and Juliet*) poetry, and non-fiction (*Tuesdays with Morrie*). This class also includes an intensive study of vocabulary building, a review of basic grammar and usage problems, and an introduction to the research project. In addition, students will be introduced to skills necessary for achieving mastery on the New York State Regents Exam in English Language Arts.

English 10

Level of Student: Grade 10

No. of Credits: 1

Prerequisite: Successful completion of English 9

Students in this course read an array of literature from various time periods and cultures. The emphasis is on classic literature that students will read and explore through analysis of theme and conflict. This course is designed to enable students to think cognitively, develop analytic skills that can be applied in other academic areas, and to prepare students for the Regents exam in eleventh grade. Units of study may include, but are not limited to, Medieval Literature, The Gothic, Dystopian Literature, and thematic studies on Justice in literature.

English 10 Honors

Level of Student: Grade 10

No. of Credits: 1

Prerequisite: 90% or above average in English 9, teacher recommendation and/or administrative approval

For the advanced student of English, the honors program is enrichment of the Regents curriculum. Students who are successful in this class have the opportunity to move on to Advanced Placement Language and Composition in eleventh grade. English 10H follows the same curriculum as English 10 but with more challenging texts and assignments. Students will develop analytic skills that can be applied in other academic areas and will prepare for the Regents exam in eleventh grade.

English 11

Level of Student: Grade 11

No. of Credits: 1

Prerequisite: Successful completion of English 10

Students in this course will study American writers from 1875 to the present. Emphasis will be placed on the "American dream." Short stories, poetry, drama, and film will be examined as well. Works of literature studied may include, but are not limited to, *The Scarlet Letter, The Crucible, The Sun Also Rises, The Great Gatsby, Catcher in the Rye, and Death of a Salesman*. In addition, students will develop a strong vocabulary base and practice reading comprehension that will prepare them for the SAT examination. Students taking this course will complete preparation for the Comprehensive English Regents exam.

IB English Language and Literature I and II HL

Level of Student: Open to 11th grade students

No. of credits: 1

Prerequisite: Successful completion of English 10

The objective of this course is to build upon one's knowledge of literature while strengthening both oral and written powers of expression. During the course of study, students will examine a variety of American and world literature while exploring a diversity of discussion styles and techniques. In the process of preparing for written exams and papers and oral exams, students will explore and embrace new ideas and philosophies. Students will learn about other worlds and cultures in the hopes of crossing boundaries and bridging gaps between our culture and those in the world.

English 12

Level of Student: Grade 12

No. of Credits: 1

Prerequisite: Successful completion of English 11

This course will combine preparation for the verbal portion of the SAT (Vocabulary building, reading comprehension, writing skills etc) with preparation for a variety of writing tasks frequently experienced after high school. Students in English 12 may also explore the creative process and the craft of theater. Works studied may include, but are not limited to, *The Stranger*, *No Exit*, *Macbeth*, *Oedipus*, and selections of mystery and detective fiction.

Advanced Placement Literature

Level of Student: Grade 12

No. of Credits: 1

Prerequisite: Teacher recommendation and/or administrative approval

This class is an intensive study of literature with a focus on British and world writers. Students will be expected to develop their critical writing skills and familiarize themselves with current sophisticated literary theory. Oral presentations and listening skills will be crucial components of the course. All students are required to take the Advanced Placement exam in English Literature and Composition in May.

Creative Writing (I and II)

Level of Student: 10-12

No. of Credits: ½

Prerequisite: None

This course will develop control and style in creative writing. Students will write original pieces of creative writing in a variety of established genres, including narrative fiction, poetry and drama. Students will follow the writing process, use peer review, and self-evaluation to revise and edit their work.

Public Speaking and Debate

Level of Student: 11-12

No. of Credits: ½

Prerequisite: None

Learn the fine art of public speaking. This course offers students instruction, practice, and skills in effective oral communication. Students will have an opportunity to develop speaking skills useful to them in both informal and formal situations. Rules of argumentation will be discussed and applied in a debate format. Much time will be spent on competitive debate. Video will be utilized. Possible topics include: informative and persuasive speeches, as well as interviews, acceptance speeches, and eulogies.

Film Studies

Level of Student: 11-12

No. of Credits: ½

Prerequisite: None

The course will begin with an introduction to the history of film along with industry terms and vocabulary. After an introduction to a specific film genre (adventure, comedy, documentary, crime, film noir, drama, horror, musical, war, and western), two films will be viewed: a classic and modern interpretation. Students will learn to write critically about film and will also extensively read criticism and theory.

Journalism I/Journalism II

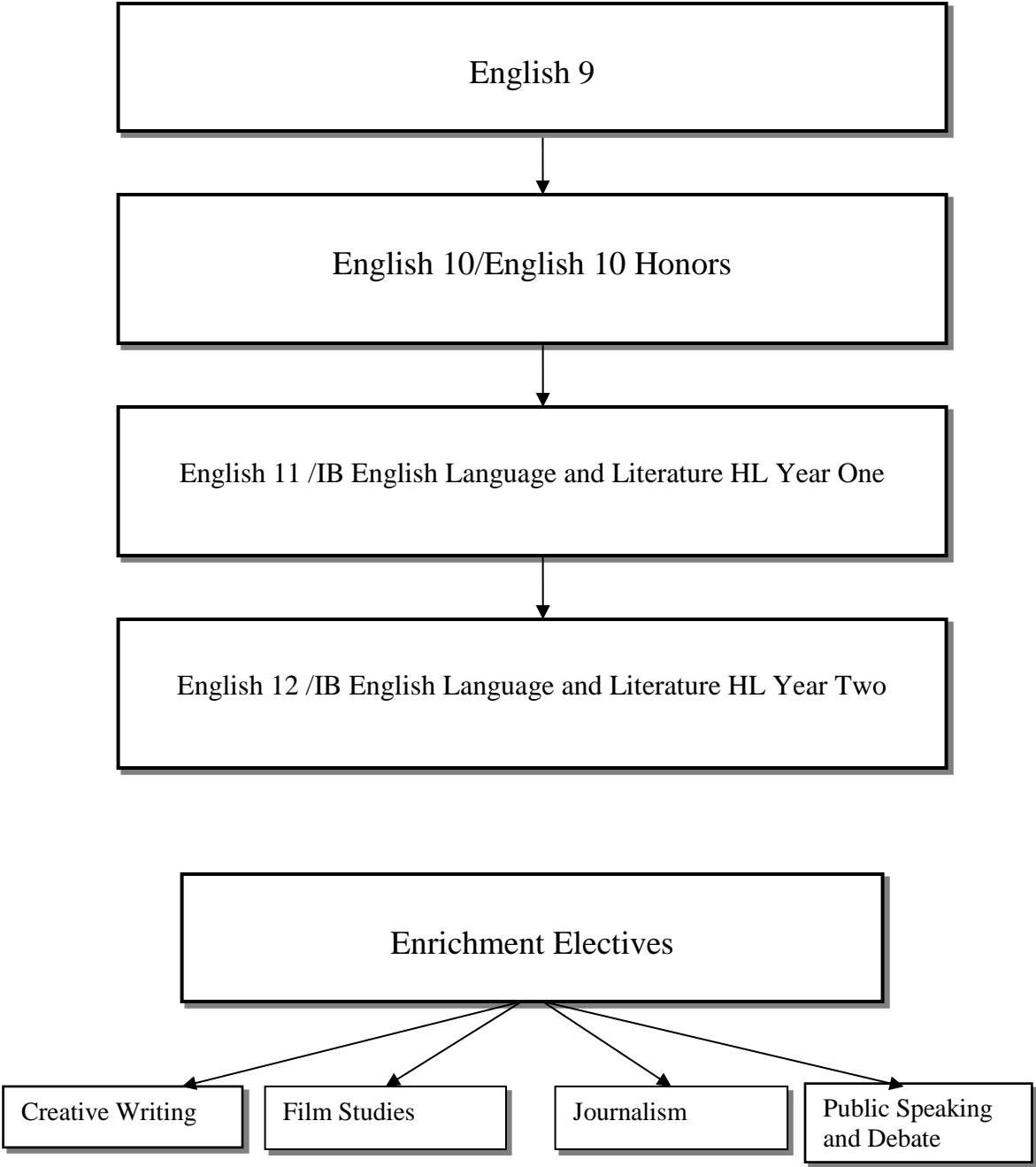
Level of Student: Grades 11-12

No. of Credits: ½ or 1

Prerequisite: None

This course will survey the scope of Journalism in today's society. The class will begin with the history of the free press in America and will go on to explore basic styles of writing for a newspaper. Students will study the process of publishing a newspaper in a digital/web-based format and in print. Journalistic techniques such as interviewing, news writing, editorials, feature stories, news briefs, layout, editing, advertising, and graphics will be explored in detail. Students work will be showcased in multiple mediums.

English



FAMILY & CONSUMER SCIENCE

Food and Culture

Level of Student: Grades 10-12

No. of Credits: ½

Prerequisite: None

This course creates a framework for understanding cultural differences and the inter-dependence of regions and countries around the world. Students are introduced to the American “melting pot” by exploring food heritage and examining how cultures influence American cuisine and learn ecological consequences of choices in the use of the environment and natural resources. Cultures of South America, Caribbean, Germany, France, Italy, Greece, Africa and Asia are studied. By experiencing the food, culture, and cooking techniques of major cuisines of the world, students develop an appreciation for cultural diversity. Current and projected food service careers are explored.

Concepts in Nutrition (HSC 104)

Level of Student: Grades 11-12

No. of Credits: 1

Prerequisite: Food and Culture

Students will acquire and apply the basic understanding of nutrition concepts to improve their nutritional health and well-being. Topics examined include sports nutrition, antioxidants, weight control diets, immunity, megavitamin therapy and nutritional lifestyles. Students will learn about the processes of digestion, absorption and metabolism and explain the roles of these systems in the nutritive process. Students will evaluate the quality of their own diets and exercise regimens, create recipes that promote wellness and prepare food that embrace the concept of good health. *This is a concurrent college course offered through Suffolk Community College’s BEACON Program.*

HEALTH & PHYSICAL EDUCATION

Health

Level of Student: Grade 10

No. of Credits: ½

Prerequisite: None

The objective of this course is to help students develop proper skills and attitudes toward physical, mental, and social wellness, with a focus on appropriate health behaviors for life. The course includes nine essential content areas: physical activity and nutrition, sexual risk, unintentional injury, violence prevention, family life/sexual health, tobacco, alcohol and other drugs, HIV/AIDS, and other areas that are essential for safety, health, and mandated N.Y.S. and National Standards.

(NOTE: A parent must submit a written request if he/she does not want his/her child to participate in the AIDS Prevention and Human Growth & Development unit. The 10th-Grade Health Course Outline, the Human Growth & Development Teacher Lesson Plan Guide, and the AIDS Curriculum Guide are all available to parents upon request.)

Senior Health Concepts:

Level of Student: Grade 12

No. of Credits: ½

Prerequisite: Health

This course has been designed so that students can recognize and utilize those factors which contribute to creation and maintenance of a healthy lifestyle. Topics include: stress, psychological health, intimate relationships, lifetime fitness, sexuality, pregnancy, binge drinking, disordered eating and other critical health issues.

First Aid and CPR (HSC 112)

Level of Student: Grades 11-12

No. of Credits: ½

Prerequisite: None

This course combines lectures, demonstrations and video with hands-on training and practice. This course covers the prevention and treatment of common emergency situations. *Responding to Emergencies* Red Cross techniques will be utilized. Successful completion of this course qualifies the participant for a certification in both Red Cross First Aid-Responding to Emergencies Certificate and a Professional Rescuer CPR Certificate. *This is a concurrent college course offered through Suffolk Community College's BEACON Program.*

Strength and Conditioning

Level of Student: Grades 11-12

No. of Credits: ½

Prerequisite: Students must have a final grade of 85 or above in their previous PE class and be participating on a school team

This course is designed to work on all aspects of speed, conditioning, and sports performance. Students will be exposed to physical, cognitive and strategic sports training. Curriculum highlights include nutritional aspects and sport specific movements and activities. This class is designed for students who are interested in advanced workouts and a high level of activity.

Physical Education

The Center Moriches Physical Education Program is dedicated to promoting lifetime fitness and physical activity. The program strives to enhance personal fitness, health, self-esteem and wellness for all students. The program provides opportunities for the exercise of student initiative, leadership and responsibility while aligning itself with the New York State Learning Standards.

Students are required to actively participate in twenty (20) weeks of physical education during grades 9-12. This is achieved by an alternating class schedule to fulfill the yearly 1/2 credit required towards graduation. The curriculum is comprised of the following categories.

Fitness for Life

These units are designed to assist students in discovering the value and benefits of physical activity. The objective is to teach the students the components of health related fitness and the principles that will build fitness properly. Students will also learn what types of activities are best for maximizing health and wellness while developing their own plan. The following activities are included in this category: Weight Training, Aerobics, Step Aerobics, Toning and Stretching, Jogging/Walking and Kick Boxing.

Lifetime Activities

These units are designed to providing students with a knowledge base to continue physical activity throughout their life. The objective is to develop an interest in activity and the attainment of competency in the management of the body, while developing useful physical skills. The following activities are included in this category: Tennis, Golf, Track and Field, Badminton, Ping Pong, Pickle ball, Stickball, Ultimate Frisbee, Handball and Adventure Education.

Team Sports Activities

These units are designed to enhance the skill level of students in the various popular team sports. The objective is to raise the skill level in a particular sport and to give students and opportunity to experience a competitive environment in a safe learning environment. The following activities are included in this category: Flag Football, Soccer, Basketball, Volleyball, Softball, European Team Handball, Floor Hockey and Lacrosse.

Students are required to dress appropriately for active participation in each class. Sneakers, T-shirts, Shorts, Sweatshirts, Sweatpants and Sweat Suits constitute preparation for class. Medically excused students may be assigned to an adaptive curriculum or alternative assignment to meet the graduation requirements. A doctor's note must be specific as to the limitations of the activity.

WORLD LANGUAGES

Spanish I

Level of Student: Grade 9

No. of Credits: 1

Prerequisite: Spanish IA (or equivalent and counselor recommendation)

This course emphasizes the development of communicative skills, reading and grammar in preparation for further study. Spanish and Latin American cultures are explored.

Spanish II

Level of Student: Grades 9-12

No. of Credits: 1

Prerequisite: Successful completion of Spanish I

This sequential language course continues to explore and develop communicative skills, reading and grammar in order to enhance a student's ability to converse, read and write on a variety of topics.

Spanish III

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: Successful completion of Spanish II

This course emphasizes vocabulary building and grammar review. Language skills are refined and complex grammatical patterns are learned. Spanish III particularly emphasizes preparing for the Regents examination at the conclusion of the year.

Spanish III Honors

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: 90% or above average in Spanish II, teacher recommendation and/or administrative approval

Spanish will be used almost exclusively for the development of the five language components: speaking, reading, writing, listening, and culture. Literature, current periodicals, and cultural activities may be included to give students a complete view of the language and people they are studying.

Spanish IV

Level of Student: Grades 11-12

No. of Credits: 1

Prerequisite: Successful completion of Spanish III

This class enables a student to enhance proficiencies in the areas of speaking, reading, writing and listening. Much of this class is conducted in group activities as well as individual project assignments. More in-depth grammatical examination and novel reading is conducted.

IB Language I and II SL Spanish

Level of Student: Open to 11th grade students

No. of Credits: 1

Prerequisite: Successful completion of Spanish III

The curriculum is designed to emphasize the acquisition of higher-level speaking, reading, writing and listening skills in the target language through a variety of authentic linguistic experiences. Students will gain linguistic knowledge, communication skills, and cultural awareness as well as develop an appreciation for the diversity of its culture by studying the art, literature, film and music of that country.

Spanish V (SPN 201 and 202)

Level of Student: Grade 12

No. of Credits: 1

Prerequisite: Successful completion of Spanish IV

The focus of this course centers on the development of oral and written communication skills within a broad range of contexts and situations. This class reviews specific grammatical structures, broadens general vocabulary and enhances pronunciation techniques to strengthen accuracy and precision in oral and written Spanish. *This is a concurrent college course offered through Suffolk Community College's BEACON Program.*

French II

Level of Student: Grades 9-12

No. of Credits: 1

Prerequisite: Successful completion of French I

This course is a continuation of the development of skills mastered in French I. The scope and content has widened to improve the student's ability to converse, read and write about a greater variety of topics. All aspects of French culture are examined and explored.

French III

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: Successful completion of French II

This course emphasizes vocabulary building and grammar review. Language skills are refined and complex grammatical patterns are learned. French III particularly emphasizes preparing for the Regents examination that concludes this course.

French IV

Level of Student: Grades 11-12

No. of Credits: 1

Prerequisite: Successful completion of French III

This class enables a student to enhance proficiencies in the areas of speaking, reading, writing and listening. Much of this class is conducted in group activities as well as individual project assignments. More in-depth grammatical examination and novel reading is conducted.

IB Language I and II SL French

Level of Student: Open to 11th grade students

No. of Credits: 1

Prerequisite: Successful completion of French III

The curriculum is designed to emphasize the acquisition of higher-level speaking, reading, writing and listening skills in the target language through a variety of authentic linguistic experiences. Students will gain linguistic knowledge, communication skills, and cultural awareness as well as develop an appreciation for the diversity of its culture by studying the art, literature, film and music of that country.

French V (FRN 201 and 202)

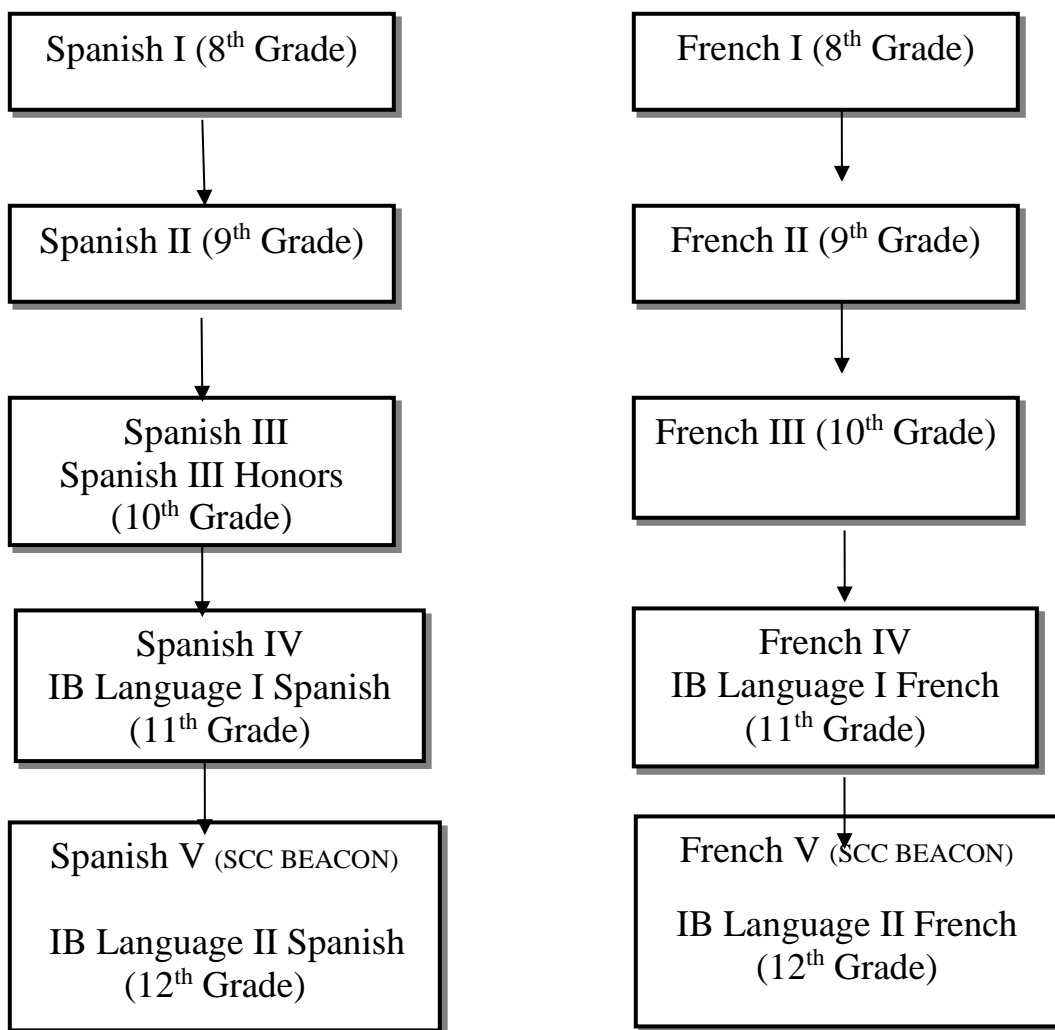
Level of Student: Grade 12

No. of Credits: 1

Prerequisite: Successful completion of French IV

The focus of this course centers on the development of oral and written communication skills within a broad range of contexts and situations. This class reviews specific grammatical structures, broadens general vocabulary and enhances pronunciation techniques to strengthen accuracy and precision in oral and written Spanish. *This is a concurrent college course offered through Suffolk Community College's BEACON Program.*

World Languages



MATHEMATICS

Algebra I

Level of Student: Grade 9

No. of Credits: 1

Prerequisite: Successful completion of Math 8

This course is algebra based with a focus on real-life applications. Topics will include linear equations in one variable, quadratic functions with integral coefficients, absolute value, exponential functions, systems of equations, coordinate geometry, geometrical representations, data analysis, correlation and causation, right triangle trigonometry, and elementary probability theory. Students will identify and justify mathematical relationships and use a variety of techniques to successfully solve problems. A Regents exam will be administered in June.

Geometry

Level of Student: Grade 10

No. of Credits: 1

Prerequisite: Successful completion of Algebra I

This course will focus on the investigation and application of the concepts of geometry. Topics will include a study of the geometric relationships of lines and planes that will lead into informal and formal proofs, the laws of reasoning (logic proofs), and the properties of triangles, polygons, and quadrilaterals. Coordinate geometry, transformational geometry, circles, geometric relationships of solids, constructions and locus will also be studied. Students will continue to develop mastery of algebraic skills as they interpret and apply geometric concepts. A Regents exam will be administered in June.

Geometry Honors

Level of Student: Grades 9-10

No. of Credits: 1

Prerequisite: 85% or above average in Algebra I and Regents exam, teacher recommendation and administrative approval

This is the second course in a three year sequence of math studies. Topics covered will be more rigorous and enriching in nature than in Geometry. A Regents exam will be administered in June.

Algebra II

Level of student: Grade 11

No. of Credits: 1

Prerequisite: Successful completion of Algebra I and Geometry

Algebra II is the capstone course of the three units of credit required for an Advanced Regents Diploma. This course is a continuation and extension of the two courses that preceded it. The topics to be studied will include polynomials, absolute value and systems of equations. Problem situations requiring the use of trigonometric equations and identities will also be investigated. This course prepares students for Pre-Calculus and other college level math classes. A Regents exam will be administered in June.

Algebra II Honors

Level of Student: Grades 10-11

No. of Credits: 1

Prerequisite: 85% or above average in Geometry Honors and Regents exam, teacher recommendation and administrative approval

This is the third course in a three year sequence of math studies. Topics covered will be more rigorous and enriching in nature than in Algebra II. A Regents exam will be administered in June.

Pre-Calculus (MAT 126)

Level of Student: Grades 11-12

No. of Credits: 1

Prerequisite: Successful completion of Algebra II, teacher recommendation and administrative approval

This course will feature topics such as polynomial, rational, trigonometric, exponential and logarithmic functions, conic sections, translations of axes, linear and nonlinear systems, trigonometric laws and formulas, DeMoivre's Theorem and complex numbers, polar and parametric equations, and partial functions. *This is a concurrent college course offered through Suffolk Community College's BEACON Program.* **The purchase of a TI-84 calculator is required.**

IB Mathematics: Applications and Interpretation I and II SL/HL

Level of Student: Open to 11th grade students

No. of Credits: 1

Prerequisite: Successful completion of Algebra II

This course is designed for students who enjoy describing the real world and solving practical problems using mathematics, those who are interested in harnessing the power of technology alongside exploring mathematical models and enjoy the more practical side of mathematics.

Advanced Placement Calculus AB

Level of Student: Grade 12

No. of Credits: 1

Prerequisite: Successful completion of Pre-Calculus, teacher recommendation and administrative approval

Topics covered in this course include exponential and logarithmic functions, limits, techniques and applications of differentiation and integration. All students are required to take the Advanced Placement exam in Calculus AB in May. **The purchase of a TI-84 calculator is required.**

Advanced Placement Statistics

Level of Student: Grade 12

No. of Credits: 1

Prerequisite: Successful completion of Pre-Calculus, teacher recommendation and/or administrative approval

Statistics is the science of summarizing and drawing conclusions from the data collected by researchers. The theory of probability is used to develop methods of statistical inference, confidence intervals, and decision theory. Topics include measures of central tendency, common statistical measures, frequency tables/graphs, probability, distributions, hypothesis testing, and field surveys. This course is useful for students planning to major in social sciences, health sciences or business professionals in such diverse fields as economics, engineering, sociology, education, business management and virtually all the sciences that rely on statistics to make important decisions about their work. All students are required to take the Advanced Placement exam in Statistics in May.

College Algebra (MAT 111)

Level of Student: Grades 11-12

No. of Credits: 1

Prerequisite: Successful completion of Algebra II

Algebra and analytic geometry will be the primary areas of study with work in a variety of topics including elementary function analysis and an introduction to circular and trigonometric functions.

This is a concurrent college course offered through Suffolk Community College's BEACON Program.

The purchase of a TI-84 calculator is required.

Statistics I (MAT 103)

Level of Student: Grade 12

No. of Credits: 1

Prerequisite: Successful completion of Algebra II

This course is designed for students interested in social sciences, health sciences, business and industry. The Theory of probability is used to develop methods of statistical inference, confidence intervals and decision theory. Topics include sample space, statistical models, binomial and normal distribution, t-distribution and chi-square distribution. *This is a concurrent college course offered through Suffolk Community College's BEACON Program.* **The purchase of a TI-84 calculator is required.**

Intermediate Algebra

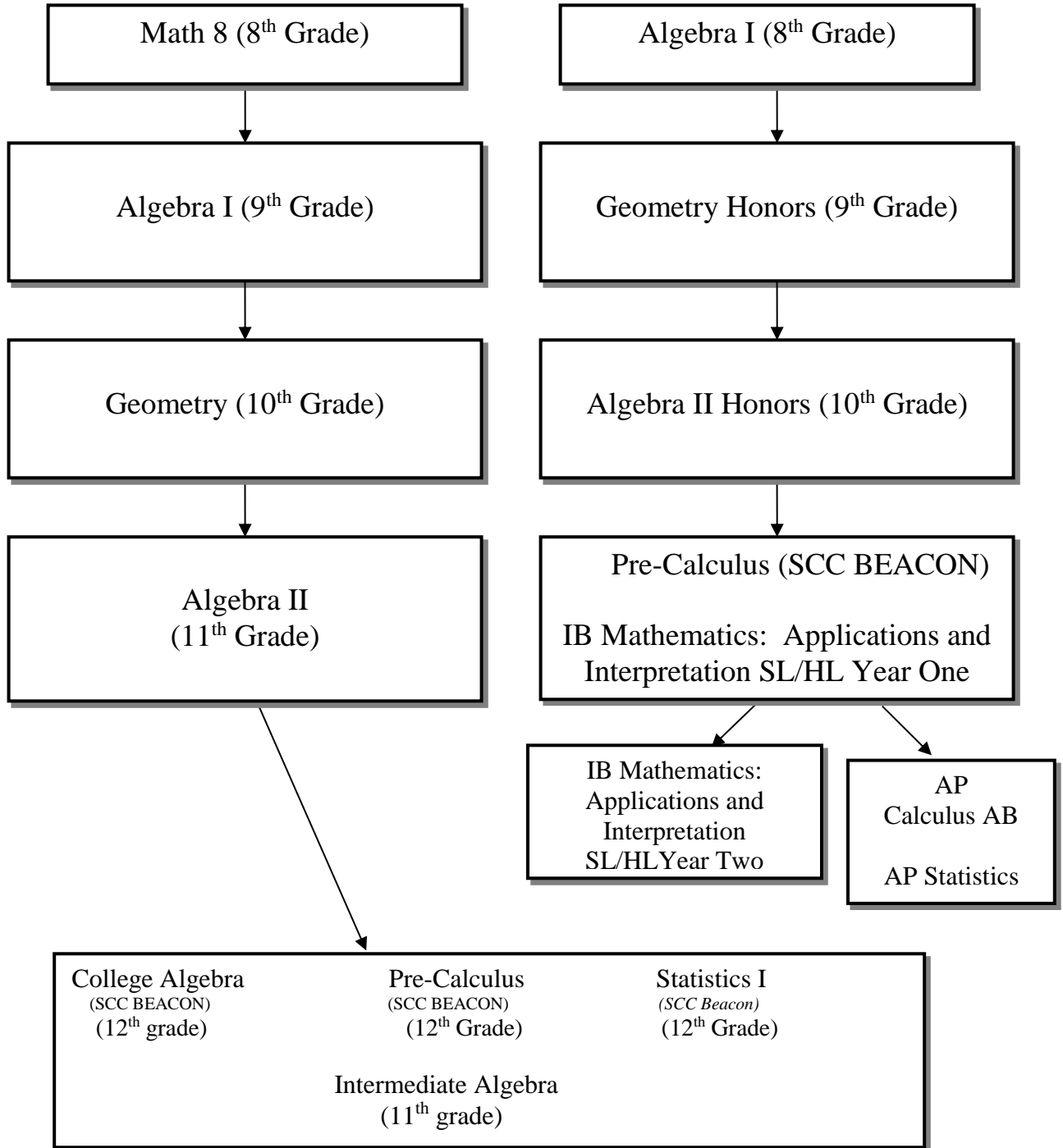
Level of Student: Grades 11-12

No. of Credits: 1

Prerequisite: Successful completion of Algebra I and Geometry

Intermediate Algebra will prepare students for the Algebra II course that is necessary for an Advanced Designation Regents Diploma. This course will continue to develop algebraic techniques, alternative solution strategies and algorithms. Additional topics include polynomials, absolute value, radical, exponential and logarithmic functions, direct and indirect variation and Quadratic-Linear systems.

Mathematics



MUSIC

Concert Choir

Level of Student: Grades 9-12

No. of Credits: 1

Prerequisite: None

The Chorus has an extensive performance schedule throughout the school year. In preparation for these performances, students are instructed in proper vocal technique, sight and advanced notation. Attendance at all performances and rehearsals are required. This course satisfies the New York State requirement for one year of fine arts at the high school level.

Symphonic Band

Level of Student: Grades 9-12

No. of Credits: 1

Prerequisite: None

The Band has an extensive performance schedule throughout the school year. In preparation for these performances, students are exposed to all types of music, band literature, ensemble techniques and theoretical concepts. Attendance at all performances and rehearsals are required. This course satisfies the New York State requirement for one year of fine arts at the high school level.

Symphonic Band/Concert Choir

Level of Student: Grades 9-12

No. of Credits: 1

Prerequisites: None

A student may take both Senior Band and Senior Chorus simultaneously. Students will attend both performance groups on alternating days.

Music Fundamentals (MUS 117)

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: Teacher and/or administrative approval

This course provides an understanding of the beginning basics of music theory. Subjects covered in this area are pitch, rhythm, harmony, meter, scales, and intervals. To reinforce the subject matter, the course focuses on written exercises, sight-singing, dictation and musical analysis. *This is a concurrent college course offered through Suffolk Community College's BEACON Program.*

Advanced Placement Music Theory I

Level of Student: Grades 9-12

No. of Credits: 1

Prerequisite: Ability to read music

This course is designed to enrich students with knowledge of basic music theory through the study of rhythm and notation, scales, chords, ear training, and music dictation. Credit from the successful completion of this course may be applied to the five-year sequence in music.

Advanced Placement Music Theory II

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: Successful completion of Music Theory I

This course is designed for the music major or music student seeking advanced work in music theory. The course is designed as a continuation of Music Theory I, with greater emphasis placed on chord progression, modulation, ear training, as well as melodic and harmonic diction. Credit from the successful completion of this course may be applied to the five-year sequence in music.

SCIENCE

The Living Environment/Biology

Level of Student: Grade 9

No. of Credits: 1

Prerequisite: Successful completion of Science 8

Students engage in studies dealing with the bio-chemical nature of living organisms, life functions in living organisms, reproduction and development, human physiology, genetics, evolution theory, and ecology. Students enrolled in this course are involved in a variety of laboratory studies that emphasize problem solving and quantitative procedures. Successful completion of the laboratory program is required for admission to the Regents exam. A Regents exam will be administered in June.

The Living Environment/Biology Honors

Level of Student: Grade 9

No. of Credits: 1

Prerequisite: 85% or above average in Earth Science and Regents exam, teacher recommendation and/or administrative approval

This challenging and enriched Living Environment course will focus on the molecular approach to biology and the comparative adaptations for survival of representative organisms. Intensive laboratory work, scientific journal readings, and a research project are required. Students will be prepared for the June Biology SAT II and Regents examinations.

The Physical Setting/Earth Science

Level of Student: Grade 10

No. of Credits: 1

Prerequisite: Successful completion of Living Environment

Areas of study include energy and measurement, properties of earth materials such as rocks, water and air, measuring the Earth, motions of the Earth, deep space, meteorology, erosion, environmental problems, and geologic history. Successful completion of the laboratory program is required for admission to the Regents exam. A Regents exam will be administered in June.

Physical Setting/Chemistry

Level of Student: Grades 10-11

No. of Credits: 1

Prerequisite: Successful completion of Living Environment and Earth Science

This course deals with the study of matter, and changes in the composition of matter. It is a lab science actively involving students in investigation and scientific inquiry in an attempt to increase awareness of the importance of Chemistry in their lives. Topics include energy and matter, atomic structure, bonding, the periodic table, stoichiometry, kinetics and equilibrium, acid-base theories, redox and electrochemistry, organic chemistry and radioactivity. Successful completion of the laboratory program is required for admission to the Regents exam. A Regents exam will be administered in June.

Physical Setting/Chemistry Honors

Level of Student: Grade 10-11

No. of credits: 1

Prerequisite: 85% or above average in LE and Regents exam, teacher recommendation and administrative approval

This course features an enriched and expanded curriculum taught through demonstration, lecture, and hands-on laboratory experiences utilizes computers and technology and requires a comprehensive mathematical background. This course will prepare students for the June Chemistry Regents examination and the SAT II in June.

Advanced Placement Chemistry

Level of Student: Grades 11-12

No. of credits: 1

Prerequisite: 85% or above average in LE and Regents exam, teacher recommendation and/or administrative approval

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year, and students use a contemporary college text. Major topics studied in this course include: Atomic Structure, Periodic Table, Bonding, Gases, Kinetic Molecular theory, Phases of Matter, Solutions, Kinetics Equilibrium, Acid-Base Chemistry, Thermo-Chemistry, Electrochemistry, Nuclear Chemistry, and Organic Chemistry. Students are evaluated based on their exams, laboratory, and individualized chemistry writing units in the course. This course, with a strong emphasis on math is recommended for students pursuing careers in science, medicine, and engineering. All students enrolled in this class are required to take the AP exam in May.

Physical Settings/Physics

Level of Student: Grades 11-12

No. of Credits: 1

Prerequisite: 85% or above average in Chemistry and Regents exam, teacher recommendation and/or administrative approval

This course presents a modern view of classical physics based on conservation of matter, energy and momentum. The topics covered include mechanics, electricity and magnetism, wave phenomena and modern physics. This is a lab-oriented program designed to produce skills in problem solving, critical thinking and cooperative learning. Students will engage in a variety of enrichment activities, including a focus on the practical applications of theoretical physics concepts. A solid foundation in mathematics is recommended for success in this course. A Regents exam will be administered in June.

Advanced Placement Physics I

Level of Student: 11-12

No. of Credits: 1

Prerequisite: Physics Honors/teacher recommendation and/or administrative approval

This course entails an algebra-based treatment of the topics that are found in a first semester college introductory physics course. Laboratory and inquiry based activities serve as the basis for concept discovery and formation as students explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory simple circuits. All students enrolled in this class are required to take the AP exam in May. A solid foundation in mathematics is strongly recommended for success in this course.

IB Biology I and II HL/SL

Level of Student: Open to 11th grade students

No. of Credits: 1

Prerequisite: None

This course is a study of the unity and diversity of living organisms on the molecular, cellular, organic and ecological levels. Topics of study include genetics, evolution, human reproduction and physiology, cell respiration, immune systems, neurobiology, and the relevance of biological principals to human beings. This course is designed for the student who wishes to meet the objectives of an introductory level college course in Biology.

IB Environmental Systems I and II SL

Level of Student: Open to 11th grade students

No. of credits: 1

Prerequisite: Successful completion of LE, ES and Chemistry Regents courses

This course is designed to engage students in the analysis of environmental issues through scientific reasoning. In addition, students will apply knowledge of environmental systems to political and social issues. Though scientific reasoning and methodology will be the focus of this course, students will be challenged to develop and discuss intrinsic natural value. Students will be able to apply scientific knowledge of environmental systems to issues of public policy. Students will gain a global perspective of environmental issues and apply that on a local scale. They will gain awareness of the importance of international cooperation and cultural respect in solving environmental problems. Students will develop inquiry based laboratory skills and techniques using current technology to gain scientific insight into environmental issues.

IB Sports, Exercise and Health I and II SL

Level of Student: Open to 11th grade students

No. of Credits: 1

Prerequisite: Successful completion of LE, ES and Chemistry Regents courses

This class is designed for the student who wants to gain a better understanding of the field of science as it relates to sports, exercise and health. A majority of time will be spent understanding how our bodies work with regards to biology, chemistry, biochemistry, physics and psychology. Topics will include anatomy, exercise physiology, energy systems, movement analysis and nutrition. Scientific principles will be used to analyze and optimize human performance.

Introduction to Science Research

Level of Student: Grade 9

No. of Credits: ½

Prerequisite: A strong interest in science and willingness to work independently

In this course, students will develop their research skills through an original research project on a topic of their choice. Students will engage in activities to improve the skills necessary to be a successful researcher, including research topic identification, a review of existing literature, observational and measurement skills, experimental design, data collection and analysis, and presentation of research findings. Successful students will have the opportunity to enter and present their research work in local and national science competitions, such as the Intel Science Talent Search, the Long Island Science and Engineering Fair, and the Siemens-Westinghouse Science and Technology Competition

Science Research Seminar

Level of Student: Grades 10-12

No. of Credits: ½

Prerequisite: Introduction to Science Research

Students will continue to improve their research skills throughout this course while conducting an original and authentic research project. Students will have the opportunity to broaden their research experience by selecting a new research topic, or a chance to deepen their knowledge about their topic of interest by continuing their research from the previous year. Students will work with a mentor in their chosen area of focus, periodically presenting their current work and defending their findings to a panel of their peers and experts. In this course, students will be encouraged to secure a summer research internship, which will help them to focus their research topic for the upcoming academic year.

Marine Science (MAR 111)

Level of Student: Grades 11-12

No. of Credits: 1

Prerequisite: None

This course is designed for students that are interested in studying the life of oceans, both in local waters and in marine aquaria maintained by the class. The course is designed to include the study of marine organisms of our own coastal area. The topics will include the world's oceans, chemical and physical factors, marine plants, invertebrates, marine vertebrates, marine ecology and sand beaches, dunes, rocky shores, coral reefs, and marine biomes. *This is a concurrent college course offered through Suffolk Community College's BEACON Program.*

Forensic Science

Level of Student: Grades 11-12

No. of Credits: 1

Prerequisite: None

This course will examine the science that deals with the application of technology to help interpret the facts in criminal law cases. The course is hands-on, with laboratory and research investigations forming the basis of the course. Topics include crime scene analysis, fingerprints, microscopic hair and fiber analysis, ballistics, arson, pathology, DNA, toxicology, serology, anthropology, deontology, and entomology.

Anatomy and Physiology

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: None

This course is designed to provide students the opportunity to explore the relationships between human body structure and function. The course is geared towards individuals interested in a health-related career; especially those who plan to study medicine, nursing, physical therapy, and athletic training. Throughout the year, we will be investigating body systems and components and anatomical and physiological disorders, medical diagnosis, and treatment.

Sports Science

Level of Student: Grades 10-12

No. of Credits: ½

Prerequisite: None

This course will explore the muscular and skeletal systems, effective exercise on the body, anatomy and physiology, drug use in the field of sports (steroids, human growth hormones and various supplements), and the effects of motion as it pertains to sports and the physics involved in speed and reaction time.

Astronomy (AST 101)

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: None

This one-year course presents a broad introduction to the science of astronomy. This course integrates ancient and observational astronomy and solar system exploration with emphasis on recent space exploration of the planets and on the comparative evolution of the Earth and the other planets. The universe is introduced, with emphasis on observations, evolution of galaxies, star formation and life cycle, including supernovae, and black holes. The course concludes with the study of the origin and evolution of life on Earth, and the search for microbial and intelligent life elsewhere in the Universe. The intent of the course is to give the student a solid background in the primary physical concepts relevant to astronomy, and a broad exposure to the astronomical universe. *This is a concurrent college course offered through Suffolk Community College's BEACON Program.*

Archaeology (ANT 1050)

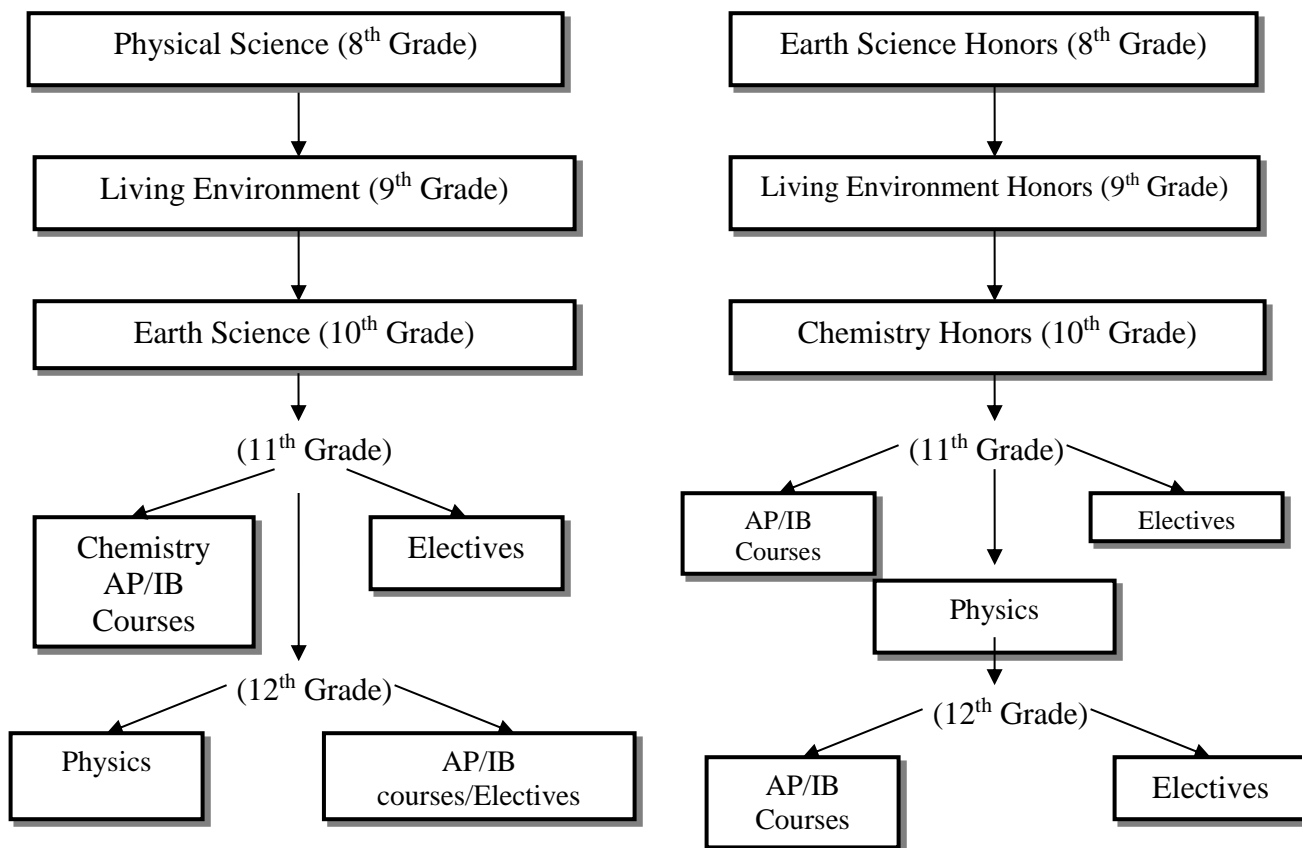
Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: None

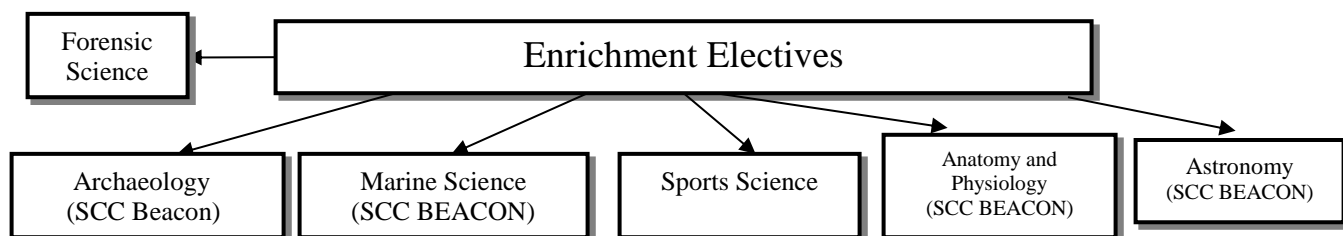
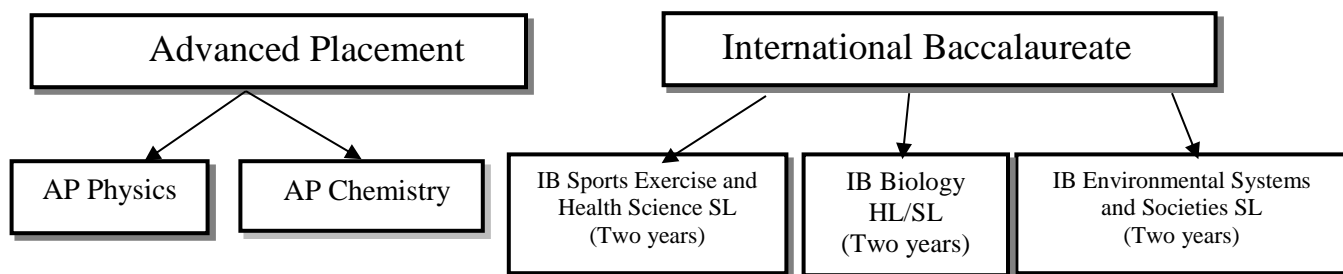
This course explores the basic concepts and methods of archaeological research, including the nature of the archaeological record and how archaeologists generate and analyze data. Excavation, analysis and interpretation of material remains from well-known Old World and New World prehistoric and historic sites are examined. Cultural variation and culture change are major themes. This course emphasizes the application of these global concepts to our own culture, thus engaging in global awareness. *This is a concurrent college course offered through Suffolk Community College's BEACON Program.*

Science



Science Research Program

- Introduction to Science Research (9th)
- Science Research Seminar (10-12)



SOCIAL STUDIES

Global History and Geography I

Level of Student: Grade 9

No. of Credits: 1

Prerequisite: Successful completion of Social Studies 8

This course is part of a two-year chronological study of world history and geography. Students will develop an understanding of world cultures and civilizations, including an analysis of important ideas, social and cultural values, beliefs and traditions. There is strong interdisciplinary emphasis in both courses with English, the Arts and Sciences, as well as an emphasis on skill development, research and writing skills. This course begins with the Paleolithic Era and continues to a period of Global Interacting from approximately 1400 to 1750.

Advanced Placement World History I

Level of Student: Grade 9

No. of Credits: 1

Prerequisite: 90% or above in Social Studies 8, teacher recommendation, and/or administrative approval

This is the first year of a two-year course of study in preparation for the Advanced Placement exam and Regents exam in tenth grade. The purpose of this course is to develop a greater understanding of the evolution of global processes and contacts in different types of human societies. The development of writing, content knowledge and analytical skills will be a primary focus. This is a college level class that will require rigorous independent study.

Global History 10

Level of Student: Grade 10

No. of Credits: 1

Prerequisite: Successful completion of Global History 9

This course is the second part of a two-year study of Global History. The course aims to provide students with cultural and historical views of Asia, Africa, Europe, and Latin America. It concludes with a Regents examination. A Regents exam will be administered in June.

Advanced Placement World History II

Level of Student: Grade 10

No. of Credits: 1

Prerequisite: AP Global History I, teacher recommendation and/or administrative approval.

This course is the second of a two-year Advanced Placement program in World History. The course highlights the nature of changes in global frameworks and causes and consequences, as well as comparisons among major societies. The course requires that students focus on broad conceptual themes and not memorize lists of facts. Attention will be give to developing writing and interpretive skills for test essays and for research. In addition to taking the Global History Regents in June, all students enrolled in this class are required to take the AP exam in May

United States History and Government

Level of Student: Grade 11

No. of Credits: 1

Prerequisite: Successful completion of Global History 10

The emphasis of this course is on the United States as an industrial nation. Constitutional and legal issues are examined as well as the United States role in the international community. A Regents exam will be administered in June.

IB History I and II HL

Level of Student: Open to 11th grade students

No. of Credits: 1

Prerequisite: Successful completion of Global History II

Students will explore United States history chronologically, beginning with pre-colonial America and concluding with contemporary events. Historical topics will include Nation Building and Challenges, Civil War, Causes, Practices and Effects as well as the Emergence of the United States in Global Affairs. These topics will be analyzed from the perspectives of the United States, as well as Canada and Latin America, as they relate to the growth of the nation. This course is designed to give students a critical perspective on the history, issues and personalities that have shaped the region of the Americas.

Economics

Level of Student: Grade 12

No. of Credits: ½

Prerequisite: Successful completion of U. S. History & Government

This one semester mandate emphasizes basic concepts and principles of economics and economic decision-making, and includes projects and brainstorming sessions to enhance the individual's ability to function as an American and world citizen.

ECO 101 Current Economic Issues

Level of Student: Grade 12

No. of Credits: ½

Prerequisite: Teacher recommendation and/or administrative approval

This course introduces students to the use of economic methods for understanding social and political events dominating news headlines. Crime, health care, poverty, taxes and other issues important to the lives of our students will be examined through an economic perspective. *This is a concurrent college course offered through Suffolk Community College's BEACON Program.*

Participation in Government

Level of Student: Grade 12

No. of Credits: ½

Prerequisite: Successful completion of U. S. History & Government

This course is designed to provide students with basic research, communication and decision-making skills used in public policy analysis. Students will develop a range of applied social science skills that will help the student make more informed choices as citizens, workers and consumers.

POL 103 State and Local Politics and Government

Level of Student: Grade 12

No. of Credits: ½

Prerequisite: Teacher recommendation and/or administrative approval

This course introduces students to state and local governments, their institutions, processes by which they govern and political environments in which they operate. Students will examine current challenges that state and local governments face due to changes in their relationship with our national government and shifting policy needs. *This is a concurrent college course offered through Suffolk Community College's BEACON Program.*

Advanced Placement United States Government and Politics

Level of Student: Grade 12

No. of Credits: ½

Prerequisite: Teacher recommendation and/or administrative approval

This course includes both the study of general concepts used to interpret United States politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs and ideas that constitute United States policies. This course serves as an alternative to the Participation in Government graduation requirement. All students enrolled in this class are required to take the AP exam in May.

Advanced Placement Comparative Government and Politics

Level of Student: Grade 12

No. of Credits: ½

Prerequisite Teacher recommendation and/or administrative approval

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

Psychology (PSY 101)

Level of Student: Grades 11-12

No. of Credits: ½

Prerequisite: None

This course will explore the various components of the emerging personality and the various stages of development. In addition, the course will explore the factors that influence human development. Included will be a survey of major theorists, including Freud, Adler, Erikson, Rogers, and Skinner.

This is a concurrent college course offered through Suffolk Community College's BEACON Program.

Criminal Justice (Criminology/SOC 205)

Level of Student: Grades 11-12

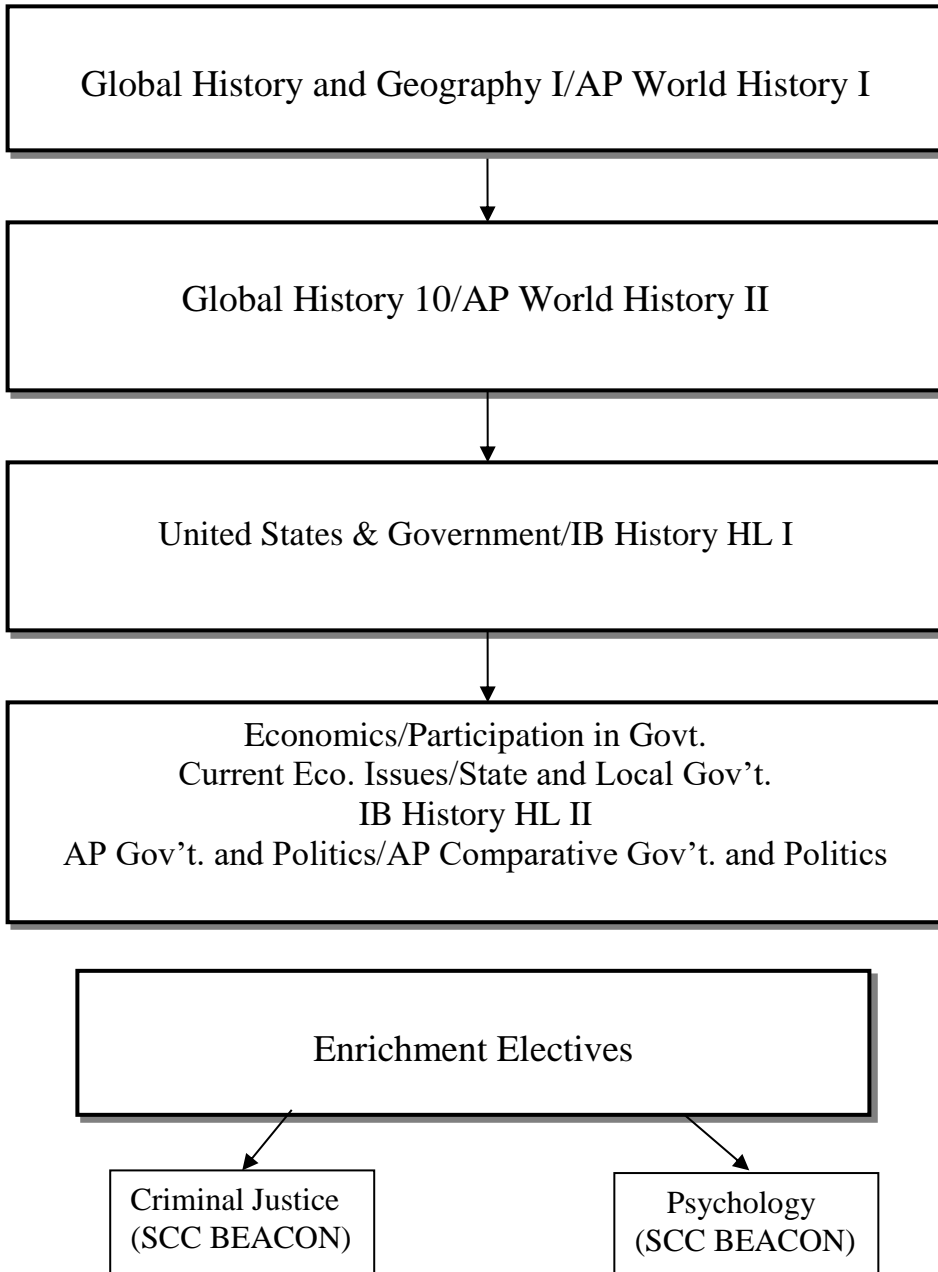
No. of Credits: ½

Prerequisite: None

This course is an introductory survey of federal, state and local criminal justice systems including an in-depth examination on the role of the police, courts, prosecutor, Grand Jury, trial jury, probation, parole, correctional system in the criminal justice system. Students will be provided a broad overview of the role of the criminal justice system in a free society with an emphasis on ethics.

This is a concurrent college course offered through Suffolk Community College's BEACON Program.

Social Studies



TECHNOLOGY

Design and Drawing for Production

Level of Student: Grades 9-12

No. of Credits: 1

Prerequisite: None

This course introduces students to technical drawing, CAD software and the use of a 3D printer. Students learn the concept of hand drafting and progress towards designing their own products which are printed on a 3D printer. Students are encouraged to explore their creativity and turn their ideas into reality.

This course satisfies the Fine Arts requirement.

Computer Aided Drafting (CAD)

Level of Student: Grades 10-12

No. of Credits: ½

Prerequisite: Design and Drawing for Production

This class is an extension of the concepts and skills acquired in Design and Drawing for Production. Students will be assigned projects in which students will apply engineering principals and utilize CAD software and 3D printers. Students will design products and produce prototypes.

Engineering Methods

Level of Student: Grades 10-12

No. of Credits: ½

Prerequisite: Design and Drawing for Production

Students will solve authentic engineering problems in a workplace environment. This is a project-based course in which students will work in teams to develop multidisciplinary products. Students will apply engineering principles and develop technical communication skills through product design.

Engineering and Robotics/Advanced Engineering and Robotics (I and II)

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisites: Design and Drawing for Production

This course introduces students to the growing field of robotics and the potential it has to change our world. Students use computer programming and engineering principles to design and build robots which can perform various tasks. Students will develop problem solving skills through their increasing use of analysis and logic, and by looking at real world applications. Case studies will include current events such as automotive trends and bioengineering.

Broadcasting I and II

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisites: Teacher recommendation and/or administrative approval

Students will participate in creating episodes for the CMHS YouTube channel, CenterMorichesTV. Students will pitch segments based on their own ideas, plan, write, record, edit and complete post production work independently and as part of the broadcasting team.

Advanced Placement Computer Science Principles

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: Teacher recommendation and/or administrative approval

This course offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the internet, cybersecurity concerns, and computing impacts. This course provides students with the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. All students enrolled in this class are required to take the AP exam in May.

Advanced Placement Computer Science A

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: Teacher recommendation and/or administrative approval

This course introduces students to computer science using the Java programming language. Topics include problem solving, design strategies, data structures, algorithms, and the ethical and social implications of computing. This course aligns with the objectives of an introductory Computer Science class taken during the first year of college. All students enrolled in this class are required to take the AP exam in May.

The World of Technology

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisites: None

In this class, student will work in small engineering teams to solve technical problems. This class is largely hands on, but Math and Science concepts will be utilized to help solve these problems. Examples of activities include, water rockets, balloon transportation, electric cars, mag-lev design and structures.

Woodworking & Construction/Advanced Woodworking and Construction

Level of Student: Grades 10-12

No. of Credits: 1

Prerequisite: None

This course will introduce students to safe use of hand and power woodworking equipment and construction tools. Students are expected to design and build a series of projects under the direction of the instructor. The technology of both woodworking and construction will be explored and lessons will be designed to cover the basic skills related to the construction trade. This course will prepare students in the areas of the construction field including framing, trim, plumbing, roofing and management. Students will leave this class with woodworking projects and a reference book to help with construction projects for the real world.

Electricity/Electronics

Level of Student: Grades 10-12

No. of Credits: ½

Prerequisite: None

Students gain an understanding of the electrical and electronic devices that make our lives easier and more enjoyable. Since this is a hands-on course, students will use various hand tools, machines, and test equipment to explore how electricity works. Activities include the building, testing and troubleshooting of circuits, the use of test equipment (meters and oscilloscopes), soldering, house wiring and small appliance repair. Student projects include burglar alarms, metal detectors, sound generators, sound to light color organs and FM wireless microphones.

Video Game Design

Level of Student: 9-12

No. of Credits: ½

Prerequisite: None

This course provides students with the opportunity to design, program and create fully functional video games using a professional framework. Students will learn what it takes to build a successful interactive environment, theme, levels, lighting and mood. Students will complete this course with several of their own fully functioning video games.

Programming with Python

Level of Student: Grades 9-12

No. of Credits: ½

Prerequisite: None

Students in this course will learn the fundamental concepts of programming using the Python programming language. Python is a simple, general-purpose language that emphasizes code readability. It is one of the fastest growing languages in popularity and is widely utilized in many industries and business sectors. This course is ideal for students who want to explore the world of computer programming.

Technology

The following flow chart illustrates how a student can obtain a five-unit sequence in Technology.

Career and Financial Management

Design and Drawing for Production
(This course satisfies the Fine Arts requirement)

Systems Courses
Computer Assisted Drawing
Engineering & Robotics
Woodworking and Construction

Electives
The World of Technology
Broadcasting I and II
Electricity/Electronics
Advanced Placement Computer Science Principles
Advanced Placement Computer Science A
Video Game Design
Programming with Python
CAD/Engineering Methods

