

**Sayreville War Memorial  
High School  
Course Description Book  
2020 – 2021**



**Sayreville War Memorial High School  
Office of Guidance and Counseling  
820 Washington Road  
Parlin, NJ 08859  
732-525-5280**

## ***Sayreville War Memorial High School***

### ***Counseling Staff***

Mrs. Donna Sicola	Supervisor of Guidance		
Mrs. Dana Keck	Counselor	A-Car	Grades 9-12
Ms. Paula Schnorbus	Counselor	Cas-Fon	Grades 9-12
Mr. Joseph Schlaline	Counselor	Foo-Ka	Grades 9-12
Mrs. Kimberly Gibson	Counselor	Ke-Mh	Grades 9-12
Mrs. Meredith Goodman	Counselor	Mi-P	Grades 9-12
Ms. Kaila O'Donnell	Counselor	Q-Sm	Grades 9-12
Mrs. Antonietta Calcagno	Counselor	Sn-Z	Grades 9-12
Ms. Alexandra Catena, SAC	Counselor		
Ms. Angela Jones	Administrative Secretary		
Mrs. Sharon Thasites	Administrative Secretary		

### ***District***

### ***Supervisors & Directors***

Mrs. Donna Sicola	Counseling and Guidance
Ms. Donna Jakubik	Social Studies, Financial Literacy, Visual & Performing Arts
Mrs. Cynthia Defina	Special Education
Mrs. Kimberly Grossman	Language Arts, World Languages, ELL
Ms. Jennifer Badami	Health, Physical Education, Athletics
Ms. Mala Maharana	Mathematics, Business, Computer Science
Ms. Carolynn O'Connor	Science, Auto Technology, Wood Shop, JROTC

## ***Sayreville War Memorial High School***

### ***Administration***

Mr. Dale J. Rubino	Principal
Mrs. Megan Romero	Vice Principal
Mr. Michael Salum	Vice Principal
Mrs. Katelyn Zurawski	Vice Principal

## INTRODUCTION

Sayreville War Memorial High School offers its students a comprehensive program of studies. The course description booklet is an important resource for students and parents. It serves as a guide to the course offerings at SWMHS. The course descriptions have been provided by department supervisors, with input from appropriate staff members.

The educational planning process is important and ongoing. The selection of courses should reflect a student's goals, achievements and aptitudes, as well as meet local, state and college entrance requirements.

Students and parents should note the importance of making sound choices in the selection of courses. **Careful reading of the contents of this book, including course descriptions and requirements, may eliminate future misunderstanding.** Remember to select courses for their value in the student's overall plan, not because of who the teacher may or may not be. **It is important to note that requests for schedule changes due to personnel will not be honored.**

**Note:** Appropriate planning and development of the master schedule is based on student requests in the spring. Students should select courses carefully. Courses chosen now should be considered firm choices. Changes will occur in the fall only to reflect summer school grades, standardized test scores or to correct school errors. All courses listed in this book are scheduled to be offered. Those which will actually be given during the 2020-2021 school year will depend upon requests for the course as well as budget constraints. As a result, **please be aware that not all offered courses may actually be given.**



# Grade 9 Electives

Course	Department	Type
Air Force JROTC		Full Year
Auto Technology 1	Technology	Semester
Band	Music	Semester and Full Year
Business Organization	Business	Semester
Career Development	Business	Semester
Children's Literature	Language Arts	Semester
Choir 101	Music	Semester and Full Year
Communicating in 21 <sup>st</sup> Century	Language Arts	Semester
Communication/TV 1	Language Arts	Semester (S1)
Communication/TV 2	Language Arts	Semester (S2)
Creative Crafts	Art	Semester
Creative Writing	Language Arts	Semester
Engineering Drawing	Technology	Full Year
Fashion Illustration	Art	Semester (S2)
Financial Literacy in the 21st Century (Economics)	Social Studies	Semester
Game Design/App Development	Computer Sciences	Semester (S2)
Intro to Computer Science	Computer Sciences	Semester
Introduction to Art	Art	Semester
Journalism	Language Arts	Semester
Microsoft Office Suite	Business	Full Year
Monsters in Literature	Language Arts	Semester
Mythology	Language Arts	Semester
Robotics	Technology	Full Year
The Great Metropolis	Social Studies	Semester
Theatre 1	Language Arts	Full Year
Wood 1	Technology	Semester
World Geography	Social Studies	Semester
Writing Success	Language Arts	Semester

# Graduation Requirements

## Coursework Requirements

Sayreville War Memorial High School is a comprehensive high school. There are certain courses required for graduation for all students, many of the subjects are elected by the student. To a large extent, the courses selected determine the type of post-high school opportunities available to the student. The Sayreville Board of Education mandates a minimum of **130 credits** for graduation.

Content Area	Minimum Credits	Additional Information
<b>LANGUAGE ARTS LITERACY</b>	20	Must be aligned with New Jersey Student Learning Standards.
<b>MATHEMATICS</b>	15	Must include <b>Algebra 1</b> and <b>Geometry</b> or the content equivalent* and a third year of math that builds on the concepts and skills of algebra and geometry and prepares students for college and 21 <sup>st</sup> century careers. Must also be aligned with New Jersey Student Learning Standards.
<b>SCIENCE</b>	15	Must include at least five credits in laboratory biology/life science or the content equivalent*; an additional laboratory/inquiry based science course including chemistry, environmental science or physics; and a third laboratory/inquiry-based science course.
<b>SOCIAL STUDIES</b>	15	Must include five credits in world history and ten credits in United States History.
<b>HEALTH, SAFETY, AND PHYSICAL EDUCATION</b>	20	As per N.J.S.A. 18A:35-4, 5, 7 and 8, students must earn 3.75 credits in health, safety and physical education during each year of enrollment, distributed as 150 minutes per week, which must also include CPR and AED instruction. <i>Sayreville has a local requirement of 5 credits of Health/PE per year.</i>
<b>WORLD LANGUAGES</b>	5	
<b>FINANCIAL LITERACY/ECONOMICS</b>	2.5	
<b>VISUAL AND PERFORMING ARTS</b>	5	See Course Description Book for list of approved courses.
<b>21<sup>ST</sup> CENTURY LIFE AND CAREERS OR CAREER TECHNICAL EDUCATION (PRACTICAL ART)</b>	5	See Course Description Book for list of approved courses.
<b>ELECTIVES</b>	27.5	
<b>TOTAL CREDITS</b>	130	

\*Content equivalent means courses or activities that include the same or equivalent knowledge and skills as those found in traditionally titled courses that are required for high school graduation and are aligned with state and local standards.

### ***Credit Requirements***

Each student must earn a minimum of 130 credits to earn a high school diploma. Credits are awarded upon the successful completion of each course. A student's grade level is determined by the number of credits that he/she has earned. Courses currently in progress do not count toward this total until they are completed. Below are the earned credit requirements for each grade level:

**Grade 9:** 0-24    **Grade 10:** 25-59    **Grade 11:** 60-94    **Grade 12:** 95 and above

### ***Graduation Testing Requirements***

The New Jersey Department of Education is in the process of adopting new high school graduation testing requirements. At this time, they have proposed the update below. It is expected that the State Department of Education will be adopting new requirements over the next few months. Therefore, this is the latest information from the NJDOE:

#### **Update Regarding High School Graduation Assessment Requirements**

##### **Classes of 2020, 2021, and 2022**

The New Jersey Department of Education (NJDOE) received an amended Consent Order from the Appellate Division of the Superior Court of New Jersey memorializing an agreement between the NJDOE and the Education Law Center addressing the high school graduation assessment requirements for the Classes of 2020, 2021, and 2022. The path to graduation that was established for the Classes of 2019 and 2020 through the initial Consent Order dated February 15, 2019 has been extended to apply to the Classes of 2021 and 2022.

##### **Classes of 2020 through 2022**

The amended Consent Order establishes the following pathways for the Classes of 2020, 2021, and 2022 to meet the high school assessment graduation requirements in both English Language Arts/Literacy (ELA) and mathematics:

1. Demonstrate proficiency on NJSLA1 /PARCC2 ELA 10 and/or Algebra I; or
2. Demonstrate proficiency in ELA and/or mathematics by meeting the designated cut score on one of alternative assessments such as other high school-level NJSLA/PARCC assessments, the SAT, ACT, or ACCUPLACER as defined in the Graduation Assessment Requirements chart; or
3. Demonstrate proficiency in ELA and/or mathematics by submitting, through the district, a student portfolio appeal to the NJDOE.

##### **The Class of 2023 and Beyond**

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

# ***ART DEPARTMENT***

**ADVANCED ART** 5 CREDITS  
**Prerequisite:** Introduction to Art or department approval;  
Grades 10-12 Full Year

The course explores in greater depth the principles of design offered in the introductory course. Projects in sculpture and still life drawing are added to the requirements. (Performing Art)

**ADVANCED PLACEMENT ART HISTORY** 5 CREDITS  
**Prerequisite:** Grades 11-12 Full Year  
Met/Exceed expectations on last NJSLA-ELA; B+ or above in Honors or AP English; A or above in CP English; Department/Supervisor Approval

The A.P. offering provides the student with an understanding of various art forms through historical and cultural contexts. Analyze artwork critically with intelligence and sensitivity. (Performing Art)

**ART WORKSHOP** 5 CREDITS (Single period)  
10 CREDITS (Double period)  
**Prerequisite:** A- or above in Advanced Art; Department/Supervisor Approval Full Year

This course provides for individual development and experimentation in a choice of different media. Portfolio preparation will be included. (Performing Art)

**CREATIVE CRAFTS** 2.5 CREDITS  
**Prerequisite:** None One Semester  
The course will cover yarn design, mosaics, copper embossing, paper marbling, latch hook rugs, dream catchers, plaster sculpture, collage and graphic design. Individual goals will be emphasized. (Performing Art)

**DIGITAL ARTS** 2.5 CREDITS  
**Prerequisite:** Grades 11-12; Introduction to Art One Semester

This course introduces students to the basics of photography, such as cropping, coloring, lighting and graphic arts, design and software skills. Brochures, programs, business cards, logos and the like will be produced. (Performing/ Practical Art)

**FASHION ILLUSTRATION** 2.5 CREDITS  
**Prerequisite:** Introduction to Art One Semester  
This course enables students to understand, analyze and draw fashion figures from different views. Skills will be developed to create unique designs. (Performing Art)

**INTRODUCTION TO ART** 2.5 CREDITS  
**Prerequisite:** None One Semester  
Explores the principles and elements of design through a variety of techniques including watercolor, tempera, sketching, pen and ink and printing. (Performing Art)

**JEWELRY AND METAL WORKING 1** 2.5 CREDITS  
**Prerequisite:** Grades 10-12 given preference One Semester  
Introduces students to the basic techniques of metal working/jewelry making. Techniques include piercing, sawing, riveting and soldering. (Performing Art)

**JEWELRY AND METAL WORKING 2** 2.5 CREDITS  
**Prerequisite:** Jewelry and Metal Working 1 One Semester  
An advanced continuation of Jewelry and Metal Working 1. (Performing Art)

**SCULPTURE AND CERAMICS 1** 2.5 CREDITS  
**Prerequisite:** Grades 11-12 given preference One Semester  
This course provides students with practical and technical knowledge in hand-formed ceramics. There will be a strong emphasis on textural and glazed decoration. (Performing Art)

**SCULPTURE AND CERAMICS 2** 2.5 CREDITS  
**Prerequisite:** B in Sculpture and Ceramics 1; Grades 11-12 given preference One Semester  
An advanced continuation of Sculpture and Ceramics 1. (Performing Art)

**STAINED GLASS** 2.5 CREDITS  
**Prerequisite:** Grades 11-12 One Semester  
The course will cover the two major styles of stained glass construction, i.e. Tiffany style and lead cane construction. Techniques include cutting, copper foil wrapping and soldering. (Performing Art)

# ***BUSINESS DEPARTMENT***

**ALL PLACEMENT CRITERIA LISTED BELOW IS AS OF THE DATE/TIME OF REGISTRATION.**

**BUSINESS ORGANIZATION AND MANAGEMENT**  
**Prerequisite:** None 2.5 CREDITS  
One Semester  
An introduction to business. Students will learn principles of business organization. Areas include money, insurance, budgeting, government and industry. (Practical Art)

**CAREER DEVELOPMENT** 2.5 CREDITS  
**Prerequisite:** None One Semester  
Designed to develop students' interests and aptitudes as well as to strengthen decision making skills. Students will explore the many careers available to them and begin to develop a path to future career possibilities. (Practical Art)

**ESSENTIALS OF MARKETING** 2.5 CREDITS  
**Prerequisite:** Grades 10-12 One Semester  
B in English 9 CP or higher

Preparing students for marketing occupations involving complex duties and decision making processes. Students are expected to participate in DECA, the student organization. (Practical Art)

**ENTREPRENEURSHIP & SMALL BUSINESS MANAGEMENT** 5 CREDITS  
**Prerequisite:** 2.5 credits in Business Full Year  
Courses

Students will gain an understanding of entrepreneurship and the role of small businesses. Students will create a small business while developing social and ethical responsibility. Students are expected to participate in DECA, the student organization. (Practical Art)

**INTRODUCTION TO ACCOUNTING** 5 CREDITS  
**Prerequisite:** Grades 10-12 Full Year  
Basic accounting skills, such as debits and credits, recording transactions and financial reports will be studied. Simulations will be used. Students will use Microsoft Excel to integrate spreadsheets. Highly recommended for business and college preparatory students. (Practical Art)

**FINANCIAL ACCOUNTING HONORS** 5 CREDITS  
**Prerequisite:** B in Algebra 2 Full Year  
Students will learn from a college level textbook and will be taught at an accelerated rate. Topics include preparation of financial statements, adjusting, closing and revising entries, inventory evaluation and fixed assets and depreciation. Microsoft Excel will be used. **This course is being offered in conjunction with Middlesex County College. If you choose to obtain college credits for this course, you will be required to pay a nominal fee to the college for obtaining these credits.** (Practical Art)

**COOPERATIVE WORK EXPERIENCE SEMINAR** 10 CREDITS  
**Prerequisite:** Grade 12. Prior to senior year students must have completed 95 credits; must have passed all sections of Standardized Testing Requirements. Students will apply to the Co Op Coordinator for approval.

This is a cooperative program between school and the business community. After completing the course, students are ready to obtain starting positions in business. Students are expected to demonstrate competence through successful participation in

the program and are encouraged to participate in DECA or FBLA, the student organizations. Besides classroom lessons, a minimum of 270 hours of outside school supervised work is required. (Practical Art)

**MICROSOFT OFFICE SUITE** 5 CREDITS  
**Prerequisite:** None Full Year  
Students will learn the basics of Word, Excel, PowerPoint and Access and will be given projects to develop their skills. Merges, macros, advance editing and advanced graphics also will be taught. (Practical Art)

**SPORTS AND ENTERTAINMENT MARKETING** 2.5 CREDITS  
**Prerequisite:** Grades 11-12 and 2.5 credits in Business One Semester  
courses

Students will learn the basics of marketing and how they are applied to sports and entertainment events. Financing, pricing, promoting products, distribution, selling, legal and ethical issues will be explored. (Practical Art)

## ***COMPUTER SCIENCES***

**ALL PLACEMENT CRITERIA LISTED BELOW IS AS OF THE DATE/TIME OF REGISTRATION.**

**COMPUTER NETWORKING AND DESIGN** 5 CREDITS  
**Prerequisite:** Algebra 1; Grades 10-12 Full Year

Students will study the internal parts of a computer, assemble a system and troubleshoot problems. Hands-on lab activities are essential components. Virtual learning tools are also integrated. (Practical Art)

**TRENDS IN COMPUTER SCIENCE - HTML** 2.5 CREDITS  
**Prerequisite:** Intro to Computer Science Fall only One Semester

Focuses on the design and construction of Internet Web pages. Students will build a sample web site, incorporating graphics, text, tables, buttons and interactivity. **This course is being offered in conjunction with Middlesex County College. If you choose to obtain 3 college credits for this course, you will be required to pay a nominal fee to the college for obtaining these credits.** (Practical Art)

**ADVANCED CONCEPTS IN COMPUTER PROGRAMMING** 2.5 CREDITS  
**Prerequisite:** Intro to Computer Science Spring only One Semester

Students will gain an understanding of advanced languages such as C++ and Java. Topics include algorithms, static and dynamic data structures, sequence, repetition and conditions. The course includes thorough coverage of the AP Computer Science syllabus, which aligns with the testing standards. (Practical Art)

### **ADVANCED PLACEMENT COMPUTER SCIENCE A**

**Prerequisite:** Algebra 1; Grades 11-12 5 CREDITS  
Full Year

The AP Computer Science A course covers topics typically found in a college-level first course in computer science, and provides a solid preparation for the AP Computer Science A examination. The course emphasis is on procedural abstraction, data abstraction, object-oriented design and programming methodology using the Java programming language, and the use of algorithms and data structures.

### **INTRODUCTION TO COMPUTER SCIENCE**

**Prerequisite:** Algebra 1 2.5 CREDITS  
One Semester

Students will be introduced to the concepts essential to all programming languages. By moving through the program development cycle of analysis, design, coding, testing, debugging and documenting, students will learn the skills necessary to enroll in advanced computer science courses. (Practical Art)

### **GAME DESIGN AND APP DEVELOPMENT**

**Prerequisite:** Intro to Computer Science 2.5 CREDITS  
One Semester

Students will be introduced to the basic elements of game design and app development. The importance of storytelling and planning will be discussed. Teamwork will be utilized as students move through program development. (Practical Art)

## ***HISTORY DEPARTMENT***

### **WORLD HISTORY HONORS**

5 CREDITS

**Prerequisite:** A- in level 1 or A in level 2 Full Year  
grade 8 Social Studies.  
90 or above on quarterly  
assessments. Met/Exceed  
Expectations on last  
NJSLA-ELA  
Teacher recommendation

A chronological view of world history from the Classical civilizations of Greece and Rome through the nationalistic revolutions of 1848. Emphasis will be placed upon the Medieval World, the Renaissance and the Reformation.

### **WORLD HISTORY CP**

5 CREDITS

**Prerequisite:** Teacher recommendation Full Year

A chronological view of world history from the Classical civilizations of Greece and Rome through the nationalistic revolutions of 1848. Emphasis will be placed upon the Medieval World, the Renaissance and the Reformation.

### **WORLD HISTORY**

5 CREDITS

**Prerequisite:** Grade 9 placement in Core Full Year  
English and teacher  
recommendation

This course is a supportive instructional program designed for students with language arts deficiencies. A chronological view of world history from the Classical civilizations of Greece and Rome through the nationalistic revolutions of 1848. Emphasis will be placed upon the Medieval World, the Renaissance and the Reformation.

### **ADVANCED PLACEMENT AP U.S. HISTORY 1**

5 CREDITS Full Year

Placement for AP US History 1 will be based on the criteria outlined below as well as teacher recommendation. In addition all students that wish to be considered for the course must complete an application in January for approval by the content area supervisor

Current Level	Quarterly 1 Exam	Quarterly 2 Exam	Semester 1 Grade	ELA NJSLA 2019 Score
Honors =10pts	A range=5	A range=5	A range=10	Exceed Expectations=10
CP=5pts	B+=3	B+=3	B+=5	Met Expectations =5
	B=1	B=1	B=2	

An in-depth, chronological study of the history of the United States from pre-Columbian explorations through the beginning of the twentieth century. Students will be exposed to traditional and revisionist interpretations of United States History.

### **U.S. HISTORY 1 HONORS**

5 CREDITS

**Prerequisite:** B+ in World History Honors Full Year  
or A in World History CP;  
Met/Exceed expectations on  
last NJSLA-ELA and  
teacher recommendation

An in-depth, chronological study of the history of the United States from pre-Columbian explorations through the beginning of the twentieth century. The course will be supplemented by documents and literature pertinent to the period of study.

### **U.S. HISTORY 1 CP**

5 CREDITS

**Prerequisite:** World History CP and teacher Full Year  
recommendation

A chronological study of the history of the United States from pre-Columbian explorations through the beginning of the twentieth century.

### **U.S. HISTORY 1**

5 CREDITS

**Prerequisite:** Grade 10 placement in Core Full Year  
English and teacher  
recommendation

This course is a supportive instructional program designed for

students with language arts deficiencies. A chronological study of the history of the United States from pre-Columbian explorations through the beginning of the twentieth century.

**ADVANCED PLACEMENT U.S. HISTORY 2** 5 CREDITS

**Prerequisite:** AP US History 1, teacher recommendation, and department approval Full Year

A continuation of AP US History 1. An in depth, chronological study of the history of the United States from the twentieth century to the present. Students will be exposed to traditional and revisionist interpretations of United States History. Emphasis will be placed upon preparation for the AP examination.

**U.S. HISTORY 2 HONORS** 5 CREDITS

**Prerequisite:** B +in US History 1 Honors or A in US History 1 CP Full Year  
Quarterly Assessments  
Met/Exceed expectations on last NJSLA-ELA and teacher recommendation

A continuation of U.S. History 1 Honors. An in-depth chronological study of the history of the United States from the twentieth century to the present. The course will be supplemented by documents and literature pertinent to the period of study.

**U.S. HISTORY 2 CP** 5 CREDITS

**Prerequisite:** US History 1 CP and teacher recommendation Full Year

A continuation of US History 1. A chronological study of the history of the United States from the twentieth century to the present.

**U.S. HISTORY 2** 5 CREDITS

**Prerequisite:** Grade 11 placement in Core English and teacher recommendation Full Year

This course is a supportive instructional program designed for students with language arts deficiencies. A continuation of US History 1. A chronological study of the history of the United States from the twentieth century to the present.

**AMERICAN GOVERNMENT/CIVICS** 5 CREDITS

**Prerequisite:** Grades 10-12 Full Year

The course will introduce students to the basic principles of our American government. Emphasis will be placed upon the Constitution and current issues with the country.

**CURRENT HISTORY** 2.5 CREDITS

**Prerequisite:** Grades 11-12 One Semester

Students will examine the economic, geographic, world, political, and sociological areas of today. Emphasis will be placed upon newspapers and televised news broadcasts.

**FINANCIAL LITERACY IN THE 21<sup>st</sup> CENTURY (ECONOMICS)** 2.5 CREDITS

**Prerequisite:** None One Semester  
Students are given a basic understanding of personal finance along with the principles of credit, interest, debt, checking, savings and taxes. Areas to be highlighted include the role of the government, money and banking and comparative economic systems.

**THE GREAT METROPOLIS** 2.5 CREDITS

**Prerequisite:** None One Semester  
Students will be provided with the opportunity to examine the architecture, history, geography, culture and cuisine of the American Metropolis during the early twentieth century. Emphasis will be placed on the various immigrant groups that came to the United States and the contributions they have made.

**HISTORY OF AMERICAN CULTURE** 2.5 CREDITS

**Prerequisite:** Grades 11-12 One Semester  
An examination of the popular culture of the twentieth and twenty first centuries in the United States. Students will analyze the evolution of music, art, film and entertainment from 1900 to the present, and how these helped shape major movements in American history.

**MODERN GLOBAL CONFLICTS** 2.5 CREDITS

**Prerequisite:** Grades 11-12 One Semester  
Students will examine situations in today's world that have caused strife among nations. Topics will include The New Europe, conflicts in the Middle East, struggles to keep world peace, human rights and facing the future.

**PEER LEADERSHIP** 5 CREDITS

**Prerequisite:** Grade 12, application, teacher recommendation, review Full Year

A course that prepares seniors to serve as role models/mentors for freshmen. One day each week will be designated as a "break-out" day when the seniors work with small groups of freshmen. Problems such as self-esteem, substance abuse and social and cultural issues are addressed. (Practical Art)

**SOCIAL FOUNDATIONS OF HUMAN BEHAVIOR** 2.5 CREDITS

**Prerequisite:** Grades 11-12 One Semester  
This course introduces the student to a better understanding of human behavior. Topics such as learning, emotions, coping with frustration, anxiety, the nervous system, motivation, personality disorders and intelligence will be discussed.

**SOCIAL ISSUES IN MODERN AMERICA** 2.5 CREDITS

**Prerequisite:** Grades 11-12 One Semester

Students are given a greater insight into current social problems. Students explore the role of the young adult in today's society, campus unrest, crime and racial conflict. Students develop a willingness to actively participate in problems facing us today.

**STREET LAW 1** 2.5 CREDITS  
**Prerequisite:** Grades 11-12 One Semester  
 Students will gain a fundamental knowledge of American law and our legal system. The curriculum is designed to provide students with an understanding of their legal rights and responsibilities.

**STREET LAW 2** 2.5 CREDITS  
**Prerequisite:** Street Law 1 One Semester  
 A continuation of Street Law 1. Students will explore First Amendment Rights, particularly freedom of expression and religion. Liability and negligence also will be covered.

**INTRODUCTION TO TOMORROW'S TEACHERS**  
**Prerequisite:** Grade 11 2.5 CREDITS One Semester  
 B+ or above in Children's Literature or Communicating in the 21<sup>st</sup> Century; Students enrolled in the Future Educators Academy will be given preference. This course will provide students who may be interested in pursuing a career in education with a chance to learn more about the profession. This course will expose students to teaching and learning of various public education settings including early childhood, elementary, middle, and high school as well as the education services.

**TOMORROW'S TEACHERS** 5 CREDITS  
**Prerequisite:** Grade 12; must have a B Full Year  
**in current English class;**  
**teacher approval**  
 An Honors course that studies the history, development, organization and practice of preschool, elementary and secondary education. Students will learn about the realities of public education and alternatives to public education.

**WORLD GEOGRAPHY** 2.5 CREDITS  
**Prerequisite:** None One Semester  
 Students will gain a basic understanding of the geography of today's world. An emphasis will be placed on the interrelationship of physical, culture and economic geography. A special emphasis on the United States also will be included.

## ***LANGUAGE ARTS DEPARTMENT***

**English 9-12 Placement Criteria**  
*Students will be placed in a College Prep (CP) level English course unless one of the courses below is applicable.*

**CORE LEVEL ENGLISH COURSES:**  
 Students requiring additional support, a slower pace or remediation in meeting the expected standards as measured by class and state mandated tests may be placed in English 9,10,11 or 12 by the teacher.

**HONORS LEVEL COURSES:** Students must meet three of the four criteria listed below.

**GRADE 12 HONORS (College Level Course)**

	Earned a B or higher in Honors Level English OR A or higher in CP Level English prior year
	Exceeded Expectations on NJSLA 10 or 11 in ELA
	Earned an A or better for Semester 1 in English this year
	Earned an A- or better for Semester 1 Quarterly exams (average of Q1 and Q2 exams)
<b>This course is being offered in conjunction with Middlesex County College. If you choose to obtain college credits for this course, you will be required to pay a nominal fee to the college for obtaining these credits.</b>	

**GRADE 9-11 ENGLISH HONORS**

	Earned a B or higher in Honors Level English OR A or higher in CP Level English prior year
	Exceeded Expectations on NJSLA year prior
	Earned an A or better for Semester 1 in English this year (average of MP 1 and 2)
	Earned an A or better for Semester 1 Quarterly exams (average of Q1 and Q2 exams)

**Placement for AP I Language and Composition (Grade 11) and AP II Literature and Composition (Grade 12) will be based on the criteria as outlined below.**

Current Level	Quarterly 1 Exam	MP 1 Grade	NJSLA 10 OR 11
API=10	A range=10	A range=10	Exceeded Expectations=10 points
Honors=7	B+=5	B+=5	Met Expectations=5 points
CP=2	B=2	B=2	

\*Applications will be accepted in January. Students will be approved by ELA Supervisor. Decisions are final.

***Additional Courses:***

**LAL SKILLS 10 & 11** 2.5/5 CREDITS  
 Students not meeting the expectations on the state mandated standardized assessment for grade 10 will be placed in a single semester required remediation course as outlined by NJDOE policies.

**LAL SKILLS 12** 2.5 CREDITS  
 Students not meeting the NJDOE's High School Graduation Requirement by the end of eleventh grade will be placed in a single semester required remediation course that focuses on NJSLs in ELA as measured by ASVAB, Accuplacer, PSAT, SAT, etc. Students will also complete necessary assessments for the NJDOE Portfolio process if necessary.

# ***LANGUAGE ARTS ELECTIVES:***

## **CHILDREN'S LITERATURE** 2.5 CREDITS

**Prerequisite:** None One Semester  
Children's literature will be used to explore a variety of genres and give students the opportunity to explore popular titles with a fresh perspective and in depth.

## **COMMUNICATION ARTS THROUGH TELEVISION 1** 2.5 CREDITS

**Prerequisite:** None One Semester

An introduction to the field of television production that will provide students with an opportunity to develop communication skills related to the medium. Extensive exposure to television production software and camera work. Students also will work on original film projects. (Performing/Practical Art)

## **COMMUNICATION ARTS THROUGH TELEVISION 2** 2.5 CREDITS

**Prerequisite:** CATV 1 and a C or better in CATV 1 One Semester

The second semester of a program designed to empower students with skills related to technical production and effective communication through the medium of television. (Performing/Practical Art)

## **COMMUNICATION ARTS THROUGH TELEVISION 3** 5 CREDITS

**Prerequisite:** CATV 2 and teacher approval One Semester

The third course of a program designed to empower students with skills related to technical production and effective communication through the medium of television. (Performing/Practical Art)

## **COMMUNICATION ARTS THROUGH TELEVISION 4-IS** 2.5/5CREDITS

**Prerequisite:** CATV 3 and teacher approval Full Year

A full-year course designed to empower students in developing and producing a television production by learning camera operation, screen writing, interviewing skills, on-camera skills, etc. (Performing/Practical Art)

## **CREATIVE WRITING** 2.5 CREDITS

**Prerequisite:** None One Semester

This course is designed for students who want to further explore their passion for writing. Skills in written expression and publishing will be explored using mentor texts from a variety of genres.

## **COMMUNICATING IN 21<sup>ST</sup> CENTURY** 2.5 CREDITS

**Prerequisite:** None One Semester

Communicating in the age of the internet and social media is the main focus of this course. Students will explore blogging, emailing, social media posting, and online researching as well as digital citizenship and public speaking. (Practical Arts)

## **JOURNALISM** 2.5 CREDITS

**Prerequisite:** None One Semester

Students will explore the production and impact of newspapers, periodicals, magazine, etc. on our society as well as develop writing skills. Students will work on a school-based newspaper, EchoLites, as a part of the coursework.

## **MONSTERS IN LITERATURE** 2.5 CREDITS

**Prerequisite:** None One Semester

Perfect course for students who love the genres of horror, mystery and science fiction. Read and analyze several examples of classic monsters stories and explore the impact and role of the genre on our society.

## **MYTHOLOGY** 2.5 CREDITS

**Prerequisite:** None One Semester

Students read, analyze and explore mythology as a genre across cultures and throughout time. Mythical connections to art, music, religion and pop culture are examined.

## **PREPARING FOR THE SAT** 2.5 CREDITS

**Prerequisite:** Grades 10-12 One Semester

A must-take course for students wanting to prepare for the college entrance exam. Explore reading strategies, vocabulary and writing skills needed to be successful.

## **WRITING SUCCESS** 2.5 CREDITS

**Prerequisite:** None One Semester

Designed to help students develop writing skills with a concentrated focus on expository skills. Topics include writing persuasively, expository writing skills and test prep tips and tricks to help with standardized assessments.

## **THEATRE 1** 5 CREDITS

**Prerequisite:** None Full Year

Students are introduced to the fundamentals of play production, stage terminology, acting terminology, structure of drama and varieties of drama. The major emphasis in the classroom is on the actual experience of basic acting techniques. This is accomplished through theatre games and improvisational exercises and, later, preliminary instruction and exercises in stage speech. (Performing Arts)

## **THEATRE 2** 5 CREDITS

**Prerequisite:** Theatre 1 Full Year

Character analysis, development, and the experience of "new theatre" exercises, provide students with opportunities to become more polished performers. Reading and classroom discussion of the history of drama, stage setting, stage lighting, costuming, and makeup enable students to be more knowledgeable in related areas. (Performing Arts)

## THEATRE WORKSHOP

5 CREDITS

**Prerequisite:** Theatre 1 and 2 and  
teacher recommendation

Full Year

Advanced theatre students are offered a great deal of choice and independent study. They are given opportunities to develop characterizations through script and theme analysis and to act as directors of complete stage productions. (Performing Arts)

# **MATHEMATICS DEPARTMENT**

**ALL PLACEMENT CRITERIA LISTED BELOW IS AS OF THE DATE/TIME OF SCHEDULING.** Students who want to double-up in math should see the supervisor for a waiver (cannot double-up in Geometry and Algebra 2). Students wishing to take an AP course must complete an AP Course application. Waivers will not be entertained for AP courses.

## ADVANCED PLACEMENT CALCULUS AB

**Prerequisite:** Application, Point Scale based on Year-to-Date Grade, Previous Year Math Grade, Algebra 1 PARCC/NJSLA-M or Geometry PARCC/NJSLA-M

5 CREDITS  
Full Year

Advanced Placement Calculus AB is a course designed to prepare students for the Advanced Placement Examination AB. This course is designed to explore not only the basic topics of differentiation and integration, but graphing, interpretation of graphs, application, theory, proofs, and topics involving the use of the graphing calculator are considered as well.

## ADVANCED PLACEMENT CALCULUS BC

**Prerequisite:** Application, Point Scale based on Year-to-Date Grade, Previous Year Math Grade, Algebra 1 PARCC/NJSLA-M or Geometry PARCC/NJSLA-M

5 CREDITS  
Full Year

Advanced Placement Calculus BC is a course designed to prepare students for the Advanced Placement Examination BC. This course is designed to explore not only the basic topics of differentiation and integration, but graphing, interpretation of graphs, application, theory, proofs, and topics involving the use of the graphing calculator are considered as well.

## ADVANCED PLACEMENT STATISTICS

5 CREDITS

**Prerequisite:** Application, Point Scale based on Year-to-Date Grade, Previous Year Math Grade, Algebra 1 PARCC/NJSLA-M or Geometry

Full Year

## **PARCC/NJSLA-M**

Advanced Placement Statistics is an advanced course covering the following topics: Analysis and evaluation of data using probability theory as a tool for analysis of a situation, which involves chance including random variables and probability distributions. The use of statistics as a basis for prediction and decision-making via random sampling, hypothesis testing, correlation, and regression analysis will also be covered.

## ALGEBRA 1

5 CREDITS

**Prerequisite:** Grade 8 Math

Full Year

This is a full year Algebra 1 course. This course will introduce students to the elementary concepts of Algebra. The student will gain an understanding of the concepts of number and space. The application of mathematics through a study of word problems is emphasized.

## ALGEBRA 2

5 CREDITS

**Prerequisite:** Plane Geometry

Full Year

This course is a continuation of Algebra 1. Students will be introduced to more advanced concepts of algebra and will increase their understanding of the concepts of numbers and space. Applications of mathematics through a study of word problems are discussed at various times throughout the course.

## FUNDAMENTALS OF COLLEGE

5 CREDITS

### ALGEBRA

**Prerequisite:** Successful completion of Algebra 1 and Geometry; open to students in Grades 11-12 and/or potential graduates

Full Year

This course is designed to strengthen the algebraic skills of students. There will be a focus on the applications of the mathematical concepts and problem solving. Students who take this class will reinforce mathematic concepts and gain skills that will help them on college entrance exams and prepare them for higher level mathematics. **This course is being offered in conjunction with Middlesex County College. If you choose to obtain 4 college credits for this course, you will be required to pay a nominal fee to the college for obtaining these credits.**

## ALGEBRA 2 HONORS

5 CREDITS

**Prerequisite:** A- in Algebra 1  
A – in Geometry OR B+ in Geometry Honors;  
B or higher on Geometry Quarterly Assessments;  
Met or Exceeded Expectations on Algebra 1  
PARCC/NJSLA-M; teacher recommendation

Full Year

This Algebra II course is designed for students who have demonstrated success in both Algebra 1 and Plane Geometry. It offers in-depth coverage of all Algebra 2 topics and moves at a faster pace than Algebra 2. In addition to the topics covered in Algebra 2, a strong emphasis in trigonometry is

included.

**ALGEBRA 3 AND TRIGONOMETRY** 5 CREDITS  
**Prerequisite:** Completion of Algebra 2 Full Year  
Honors or C or better in Algebra 2

This course is designed for students who, while interested in mathematics, have no desire or need for the standard course in Pre-Calculus. The material covered will include some topics from Algebra, factors, determinants, synthetic division, as well as topics from Trigonometry, functions, conic sections.

**CALCULUS HONORS** 5 CREDITS  
**Prerequisite:** B in Pre-Calculus OR Full Year  
C+ in Pre-Calculus Honors  
AND teacher recommendation

This course includes a non-sophisticated treatment of limits and continuity of functions. The definition of a derivative and definite integral are developed in detail. The process of differentiation and integration of algebraic, circular, exponential and logarithmic functions and their applications are studied in depth. Several techniques of integration are explored including algebraic substitutions. **This course is being offered in conjunction with Middlesex County College. If you choose to obtain 4 college credits for this course, you will be required to pay a nominal fee to the college for obtaining these credits.**

**MATH 104: ALGEBRA LAB** 2.5 CREDITS

**Prerequisite:** Standardized Test Scores One Semester  
This course is for students who took grade 8 math. Topics from Algebra 1 will be covered with an emphasis on problem solving. Students will receive an intensive review of the basic skills in preparation of the state mandated NJSLA-M Assessment.

**MATH 204: GEOMETRY LAB** 2.5 CREDITS

**Prerequisite:** Current enrollment in One Semester  
Plane Geometry AND C- or lower in Algebra 1  
AND / OR  
Not meeting expectations on PARCC/NJSLA-M

This course is for students who took Algebra 1 in grade 9. Topics from Geometry 1 will be covered with an emphasis on problem solving. Students will receive an intensive review of the basic skills in preparation of the state mandated NJSLA-M Assessment.

**MATH 404 A** (Fall) 2.5 CREDITS

**MATH 404 B** (Spring) 2.5 CREDITS

**Prerequisite:** Standardized test scores  
This course is designed for those students who have not attained a graduation test requirement. These courses will emphasize and reinforce the New Jersey Student Learning Standards. Students will explore their problem solving strategies, and they must be able to communicate their solutions in written form.

**PLANE GEOMETRY** 5 CREDITS

**Prerequisite:** Algebra 1 Full Year

This course includes an introduction to basic geometric concepts and an in-depth study and classification of lines, triangles, other polygons and circles. The ideas of proof, including emphasis on congruence and similarity, are stressed.

**PLANE GEOMETRY HONORS** 5 CREDITS

**Prerequisite:** B+ in Algebra 1 Honors OR Full Year  
A in Algebra 1-9 CP; A- or higher on Quarterly Assessments; Met or Exceeded Expectations on Algebra 1  
PARCC/NJSLA-M; teacher recommendation

This course is designed for those students who have been accelerated in their study of Algebra 1 or who have been exceptional students in Algebra 1 at the high school. In addition to the topics covered in Geometry, students will be expected to demonstrate independent thinking, as they explore and solve in-depth problems related to the covered topics and their applications. There is a strong emphasis on formal proof.

**PRE-CALCULUS** 5 CREDITS

**Prerequisite:** C in Algebra 2 Honors or B Full Year  
in Algebra 2 CP OR  
successful completion of  
Algebra 3/Trigonometry;  
teacher recommendation

In this course, students will gain an understanding of the properties of the trigonometric functions and their applications. In addition, students will gain an understanding of Algebra in the solution and classification of the concepts of functions and the conic sections. There will be a review of the fundamentals of Algebra and Geometry that are necessary for understanding the concepts of Trigonometry and Pre-Calculus. **This course is being offered in conjunction with Middlesex County College. If you choose to obtain 4 college credits for this course, you will be required to pay a nominal fee to the college for obtaining these credits.**

**PRE-CALCULUS HONORS** 5 CREDITS

**Prerequisite:** A+ in Algebra 2 CP OR B Full Year  
in Algebra 2 Honors; B on the Algebra 2 Quarterly Assessments;  
Met or exceeded expectations on Algebra PARCC/NJSLA-M; teacher recommendation

This course provides an in-depth analysis of functions and their graphs both algebraically and graphically. The emphasis of the course is upon topics, such as trigonometric and logarithmic functions. The properties of arithmetic and geometric sequences will be explored. An introduction to Calculus topics such as limits, continuity, and the derivative of polynomial functions is also included.

**This course is being offered in conjunction with Middlesex County College. If you choose to obtain 4 college credits for this course, you will be required to pay a nominal fee to the college for obtaining these credits.**

**PREPARING FOR THE SAT** 2.5 CREDITS  
**Prerequisite:** Grades 10-12 One Semester  
Please see PREPARING FOR THE SAT in the Language Arts Department section.

**STATISTICS** 5 CREDITS  
**Prerequisite:** B- in Algebra Full Year  
3/Trigonometry OR C in Pre-Calculus; teacher recommendation

This course is an introductory, non-calculus based study of statistics designed as an elective math course. This course will introduce major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will also explore models of quantitative analysis in the natural sciences, the social sciences, business, and other disciplines, and will learn how and when statistical frameworks can be applied to data to draw conclusions and make predictions. **This course is being offered in conjunction with Middlesex County College. If you choose to obtain 3 college credits for this course, you will be required to pay a nominal fee to the college for obtaining these credits.**

## ***MUSIC DEPARTMENT***

**ADVANCED JAZZ STUDIES** 5 CREDITS  
**Prerequisite:** Audition/Interview 5 Full Year  
Teacher recommendation

This full year course is designed to meet the needs of the serious music student. Course work will contain music theory, improvisation, Big Band and Small Combo jazz styles. Instrumentalists should play one of the following instruments: Saxophone, trombone, trumpet, piano, bass, drums, vocalist, and/or guitar. Students in this course are expected to perform with the HS Concert band program as well as several festivals throughout the school year. (Performing Art)

**BAND** 2.5 CREDITS/One Semester  
5 CREDITS/Full Year

**Prerequisite:** Instrumental Proficiency  
This is a course for students with previous instrumental experience. Students are expected to perform at various events throughout the school year. (Performing Art)

**CHOIR 101** 2.5 CREDITS/One Semester  
**Prerequisite:** None 5 CREDITS/Full Year  
Geared for the beginning ensemble singer. Each student must participate in at least one after-school rehearsal and an evening performance per semester. (Performing Art)

**CHOIR 201** 2.5 CREDITS/One Semester  
**Prerequisite:** Mixed Choir 101 5 CREDITS/Full Year  
or audition

A continuation of Mixed Choir 101. Emphasis will be placed

upon improving vocal technique, sight reading skills and other fundamentals at an intermediate level. Each student must participate in at least one after-school rehearsal and an evening performance per semester. (Performing Art)

**CHOIR 301** 2.5 CREDITS/One Semester  
**Prerequisite:** Mixed Choir 201 5 CREDITS/Full Year  
or audition

In order to enroll in this course, students must have demonstrated a high talent/dedication level. Independent singing will be encouraged, and an advanced repertoire will be developed. Each student must participate in at least one after-school rehearsal and an evening performance per semester. (Performing Art)

**CHOIR 401** 2.5 CREDITS/One Semester  
**Prerequisite:** Audition 5 CREDITS/Full Year  
Students will develop skills as a soloist or small group specialist. Repertoire will include Broadway, Jazz, Swing, Pop, Classical and Folk. Students will use state-of-the-art technology to analyze, record and create. Each student must participate in all after school choral events. (Performing Art)

**MUSIC TECHNOLOGY 1** 2.5 CREDITS  
**Prerequisite:** Interview with instructor; One Semester  
Basic Music Theory Exam

An introduction to music computer software. The ability to play an instrument is not required. Skills include composing, arranging and recording. Keyboard skills are a plus but not necessary. (Performing/Practical Art)

**MUSIC TECHNOLOGY 2** 2.5 CREDITS  
**Prerequisite:** Music Technology 1 One Semester  
Designed for advanced music computer users. Students will participate in cross-curricular events such as Theatre, Film, Chorus, Band, etc. Students will receive training in sound equipment and basic recording techniques. (Performing/Practical Art)

**RECORDING AND ENTERTAINMENT PRODUCTION**  
**Prerequisite:** Grades 11-12; cumulative B 5 CREDITS  
average; interview with Full Year  
instructor

A cross curricular course designed to introduce students to the different aspects of music/entertainment and record production. Students will join Fedora Productions, a mock entertainment company, and will increase their awareness of intellectual-property rights. Students will delve into Human Resources, Accounting/Finance, Artist/ Repertoire Development, Legal, Marketing, Graphic Design, Engineering and more. Students do not need to be musicians to participate in the course. (Performing/Practical Art)

# **PHYSICAL EDUCATION DEPARTMENT**

## **PLEASE NOTE:**

The format for Health and Physical Education requires students to pass health and physical education every year attending high school with the following courses:

- one (1) marking period of Health (Health 9, 10, 11 or 12) **and**
- three (3) marking periods of Physical Education (PE 9, 10, 11 or 12)

## **PHYSICAL EDUCATION** 3 or 3.5 CREDITS

**Prerequisite:** None (3) Marking Periods

The Physical Education program consists of a combination of skills, knowledge and assessment with the emphasis placed on participation. A wide variety of activities are taught, ranging from team and individual sports to fitness and wellness of lifelong activities.

## **HEALTH** 1 or 1.5 CREDITS

**Prerequisite:** None (1) Marking Period

Marking periods cover a wide range of current health topics ranging from personal health, addictions, disorders, disease, suicide, sexuality, reproduction, peer relationships, nutrition, mental health and overall wellness. State mandates include New Jersey State Driver's Education, CPR/AED lifesaving skills, healthy relationships and dating violence.

# **SCIENCE DEPARTMENT**

All science courses include laboratory experiences.

To be eligible to enroll in two 6-credit lab sciences, students must have a semester average of A in their current Science, Math and LAL courses. Recommendations by teachers for students who would like to take two 6-credit lab sciences will be made based on satisfying the prerequisites for both courses through the supervisor. Waivers will not be entertained for AP Biology, AP Chemistry, AP Environmental Science or AP Physics.

## **ADVANCED PLACEMENT BIOLOGY** 6 CREDITS

**Prerequisite:** Semester 1 average of A in current SCIENCE AND LAL courses; A- in Biology Honors OR A in Biology CP(6); completed AP Science application

Advanced Placement Biology is a college level course that is taught at a fast pace. Students taking this course should be

responsible and committed to spending extensive time and effort in study. Some topics require independent study. The course is designed to prepare students for the AP exam and uses the College Board AP Biology syllabus for topics and laboratories. Additional activities and laboratories may be included to enrich the course. Students are required to do independent research and oral presentations. Some of the areas covered are Biochemistry, Cytology, Evolution and Genetics, Plant Physiology and Anatomy, Mammalian Anatomy, and Ecology. An independent study project will be completed in the summer prior to the course.

## **ADVANCED PLACEMENT CHEMISTRY** 6 CREDITS

**Prerequisite:** A- in Chemistry Honors OR A in Chemistry CP (6); Semester 1 average of A or higher in current MATH AND LAL course; B+ in Algebra 2 CP or higher; completed AP Science application

Advanced Placement Chemistry is designed for the student who has a strong ability in science and mathematics and who has exhibited an interest in acquiring an in-depth knowledge of chemistry. The course offers the student the in-depth scientific background needed to pursue a career in science. An independent study project will be completed in the summer prior to the course.

## **ADVANCED PLACEMENT** 5 CREDITS

### **ENVIRONMENTAL SCIENCE** Full Year

**Prerequisite:** Semester 1 average of A- in current SCIENCE AND LAL courses; B+ in Biology Honors OR A in Biology CP(6); B in Chemistry Honors OR A in Chemistry CP(6); B+ in Algebra 2 CP or higher; teacher recommendation; completed AP Science application

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.

## **ADVANCED PLACEMENT PHYSICS** 6 CREDITS

**Prerequisite:** A in Physics OR B+ in Physics Honors; B+ in Pre-Calculus; concurrent enrollment in Calculus or higher; teacher recommendation; completed AP Science application

This course follows an Advanced Placement curriculum specifically designed to be a college-like course that follows successful completion of CP Physics. The course covers all traditional fields of physics including mechanics, waves, sound, light, optics, electricity and magnetism. This is a

mathematically rigorous study of Physics where students will need an understanding of Algebra and Trigonometry to succeed in this course. An independent study project will be completed in the summer prior to the course.

**ASTRONOMY** 2.5 CREDITS  
**Prerequisite:** C in Biology or Environmental Science; Grades 11-12 One Semester

Astronomy is a course designed to give students an awareness of one's efforts to understand the universe. Students will learn how one's understanding of the heavens has changed with the advance of space technology. Hands-on activities will be an integral part of the course.

**BIOLOGY HONORS** 6 CREDITS  
**Prerequisite:** Semester 1 average of A- in Science 8401 OR A in Science 8402 (for 9<sup>th</sup> grade); Semester 1 average of A- in Physics (for 10<sup>th</sup> grade); A- in LAL courses AND Algebra 1; Algebra 1 NJSLA score meets or exceeds expectations (10<sup>th</sup> grade and higher); Quarterly Assessment grade of A- or higher in current science course; teacher recommendation; concurrent enrollment in Geometry CP or higher Full Year

This lab course is designed for students who have a strong interest in science and the motivation to work hard throughout the school year. Biology Honors includes a more intensive investigation of the Biology CP course topics and is presented at a faster pace. In addition to the course concepts and laboratory work, emphasis will be on higher level thinking skills, writing assignments, oral reports and projects. The curriculum emphasizes topics in molecular biology that include biochemistry, ecology, cytology, genetics, taxonomy and evolution. The weekly two-period lab class focuses on the development of laboratory skills and problem solving through experimentation and student-centered, hands-on activities.

**BIOLOGY CP** 6 CREDITS  
**Prerequisite:** B- in Physics 9 or Environmental Science AND in current LAL course; teacher recommendation; concurrent enrollment in Geometry Full Year

College Preparatory Biology lab course is designed to offer students a wide scope of experiences in Biological Science. The curriculum emphasizes topics in Molecular Biology that include Biochemistry, Ecology, Cytology, Genetics, Taxonomy and Evolution. The weekly two-period lab class focuses on the development of laboratory skills and problem solving through experimentation and student-centered, hands-on activities. This course contains some dissections\*.

**BIOLOGY CP** 5 CREDITS  
**Prerequisite:** Students not meeting requirements for above will be placed in Biology CP (5) Full Year

The Biology lab course is designed primarily for students who have difficulty with math and science. The course will offer a sequence of laboratory experiences that will parallel topics discussed in class. The Biology course will cover the same major topics that are presented in CP Biology, but with appropriately less rigor in terms of detail and amount of additional topics covered.

**CHEMISTRY HONORS** 6 CREDITS  
**Prerequisite:** A- or higher in Biology Honors; Quarterly Assessment grade of A- or higher in current science course; B in Geometry Honors OR A in Plane Geometry; B in Algebra 1; Algebra 1 NJSLA scores meets or exceeds expectations; teacher recommendation; concurrent enrollment or completion of Algebra 2 CP or higher Full Year

Chemistry Honors is designed for students who have a strong interest in science and the motivation to work hard throughout the school year. Chemistry Honors includes a more intensive investigation of the Chemistry CP course topics and is presented at a faster pace. In addition to the course concepts and laboratory work, emphasis will be on higher level thinking skills, writing assignments, oral reports and projects. The curriculum emphasizes topics in inorganic chemistry, including atomic structure, chemical bonding, stoichiometry, acids and bases, and gas laws. The weekly two-period lab class focuses on the development of laboratory skills and problem-solving through experimentation and student-centered, hands-on activities. In addition to the numerous laboratory experiences there is an emphasis on problem-solving, physical and mathematical modeling, research methods and experimental techniques. Success in this course requires students to have a strong foundation in algebra.

**CHEMISTRY CP** 6 CREDITS  
**Prerequisite:** B- in Biology CP (6) OR A- in Biology (5); B- in current Math course; B- in Algebra 1; teacher recommendation; concurrent enrollment in Algebra 2 Full Year

College Preparatory Chemistry provides students the opportunity to acquire a solid foundation of chemical principles and concepts. The year is devoted to topics in inorganic chemistry, including a foundation based on formula writing, the balancing of equations, stoichiometry, acids and bases, and gas laws. In conjunction with the course content, a laboratory sequence is offered. This sequence parallels the text and affords the opportunity to experience first-hand not only the analyses and problem solving discussed in class, but also the chemical techniques associated with the course. The

weekly two-period lab class focuses on the development of laboratory skills and problem solving through experimentation and student-centered, hands-on activities. Success in this course requires students to have a foundation in Algebra.

**CHEMISTRY CP** 5 CREDITS

**Prerequisite:** Completion of Algebra 1 and Full Year Biology

The Chemistry course is designed primarily for students who have difficulty with math and science. The course will offer a sequence of laboratory experiences that will parallel topics discussed in class. The Chemistry course will cover the same major topics that are presented in Chemistry CP (6 credits) but with appropriately less rigor in terms of detail and mathematical emphasis.

**ENVIRONMENTAL SCIENCE** 5 CREDITS

**Prerequisite:** For Grades 11-12 students, Full Year successful completion of Biology

Environmental Science is a lab science that acquaints the students with the earth: its structure, its resources and man's impact on its sustainability. The Geology component of the course includes the investigations of the geological timetable, plate tectonics, land and water formations, earthquakes and volcanoes, among other topics. The ecological component includes population, conservation and environmental health. The unit on weather includes meteorology and climatology.

**FOOD SCIENCE** 2.5 CREDITS

**Prerequisite:** For Grades 11-12; One Semester Successful completion of Chemistry CP or higher

Semester lab elective that incorporates nutrition, food processing techniques and procedures. Includes the applications of the science concepts and principles such as chemical reactions, physical and chemical properties of food, role of food preservatives, polymer denaturation and food spoilage. Career awareness and planning for success in the food industry/research development/FDA/Hospitality industry.

**FORENSIC SCIENCE** 2.5 CREDITS

**Prerequisite:** B in Biology CP or higher One Semester

Forensic Science is a lab science elective in which students study and use scientific concepts and technologies related to the investigation of a crime. In this course, students will apply the techniques that professionals use to identify and collect evidence, analyze and compare it, and use the results to locate criminal perpetrators. The course will take you from the crime scene to the laboratory to the courtroom. It should be noted that many criminal acts are, by their very nature, violent. This course is not designed to specifically focus on crimes of a graphic or sexual nature; however, in an effort to provide an accurate and realistic perspective, certain aspects of such behaviors may be unavoidable. In this course you'll learn the step by step procedures for analyzing hair, fiber, fingerprints, chemicals, and blood stains; testing for drugs and alcohol; examining DNA samples; and much more. You'll also learn how to use specialized forensic equipment, reconstruct a crime scene, and prepare a lab report for presentation in court.

**HUMAN ANATOMY, PHYSIOLOGY AND DISEASE**

**Prerequisite:** B- in Biology CP (6) OR 2.5 CREDITS  
A- in Biology CP (5); One Semester  
Grades 11-12

Human Anatomy, Physiology and Disease is a lab course in Human Biology designed to give students an awareness of the interrelationships between the human body and its physical and social environments. In addition to the traditional anatomy and physiology covered to provide background, this rigorous course includes the impact on the human body of diseases and disorders. How all of the above can impact on the next generation is examined. This course provides the opportunity to learn about diagnostic tests, ("blood work" to CAT scans and ultra sound scans), and treatments (by-pass heart surgery to radiation). This course contains some dissections.\*

**INTEGRATED SCIENCE** 5 CREDITS

**Prerequisite** For Grade 9, completion Full Year  
of 8<sup>th</sup> grade science; for  
Grades 11-12, completion  
of Environmental Science  
AND Biology

Integrated Science is a lab science course that exposes students to several disciplines. This course explores foundational topics in physics, chemistry and environmental science.

**MARINE BIOLOGY** 2.5 CREDITS

**Prerequisite:** B- in Biology CP (6) One Semester  
OR A- in Biology CP  
(5)

Marine Biology, a lab science, is an introduction for students interested in pursuing this area of study in college or to gain an understanding of the marine environment. The "hands on" course covers the understanding of the oceans, identification and classification of marine animals and plants, environmental factors, marine habitats, water analysis, and human interaction and conservation. Students will participate in laboratory activities, field trips and specimen dissections.

**PHYSICS HONORS** 6 CREDITS

**Prerequisite:** Semester 1 average of A- in Full Year  
current science course;  
Quarterly Assessment grades  
of A- or higher in current  
science course; B+ in Algebra  
2 Honors OR A in Algebra 2  
CP; Algebra 1 NJSLA score  
meets or exceeds expectations;  
teacher recommendation;  
concurrent enrollment or  
completion of Pre-Calculus or  
higher

Honors Physics is an extremely rigorous inquiry-based course designed to expand on the principles of how and why the world around us works. The course is designed to find practical applications of physics through experiments, data analysis, problem solving, projects, and discussions with an

emphasis on mathematical applications. Students will investigate topics of motion, force, energy, waves, sound, light, and electricity & magnetism. This course is highly recommended for students considering a career in science or engineering. Math intensive, Pre-Calculus is infused within the context of the Physics content. The intense rigor of this course should be strongly considered when choosing to enroll.

**PHYSICS 11** 6 CREDITS

**Prerequisite:** Open to students in Grades 11-12; quarter 1 average of B or higher in Chemistry CP6 or Chemistry Honors; Average of B or higher in Algebra 2 CP or higher; teacher recommendation

This rigorous Physics course focuses on the application of concepts related to matter and energy through various laboratory experiences. This course will focus on and implement the use of Algebra and Trigonometry in solving problems related to Physics. In the lab, students are acquainted with the collection and analysis of data. Topics include motion and forces, vectors, work and energy, heat, electricity, electromagnetism, waves, sound, light and Modern Physics.

**PHYSICS 9** 5 CREDITS

**Prerequisite:** Open to students in Grade 9; semester grade of B in 8401 or B+ in 8402; B+ in Algebra 1 or A- in Algebra 8; quarterly grades of B+ in math; Algebra 1 NJSLA score meets or exceeds expectations; teacher recommendation

Physics is the mathematical study of matter and energy at the most basic level. The application of concepts will be developed through demonstrations, real-world applications, problem-solving, and experiments. In the lab, students are acquainted with the collection and analysis of data. This course is focused on the use of Algebra 1 in evaluating problems and investigations in Physics. Topics include Mechanics, Matter, Energy, Light and Sound.

**SCIENCE IN SOCIETY: LIFE SCIENCE EDITION**

**Prerequisite:** Grades 11-12 2.5 CREDITS  
One Semester

In this hands-on science laboratory course, students will explore the strange and wonderful aspects of biology. Scientific concepts learned in previous science classes will be applied to develop a deeper understanding of science in our everyday lives. Students will practice the scientific method by designing their own experiments and analyzing the resulting data. Students will distinguish between fact and opinion while deciding where they stand on controversial scientific issues that affect the public. Topics are determined based upon student and instructor interest and may be based, in part, on current events. Topics will inevitably include branches of brain science due to its popularity with students.

**SCIENCE IN SOCIETY: ENERGY & TECHNOLOGY EDITION** 2.5 CREDITS

**Prerequisite:** Grades 11-12 One Semester

This class begins with a study of flames and energy through a variety of hands-on experiments that use the scientific method. Further topics are selected by students in the class by a vote or survey. Scientific concepts learned in previous science classes will be applied to develop a deeper understanding of science and technology in our everyday lives. Students will practice the scientific method by designing their own experiments and analyzing the resulting data. Students will distinguish between fact and opinion while deciding where they stand on controversial scientific issues that affect the public. Topics will inevitably include engineering and building of structures, such as towers and bridges, due to their popularity with students.

**DISSECTION OPTION STATEMENT**

*\*Participation in hands-on science is important to learning science, and dissections are an important component of life science education. Dissections are recommended study methods in life science courses. Animal materials are used respectfully and for the purpose of meeting course objectives.*

*In cases where parents, or students 18 years of age or older object to dissection, teachers will provide alternatives to actual dissections. These alternatives may include, but are not limited to: computer simulations, media presentations, transparencies, textbook overlays, and reading/research.*

*If a parent chooses not to have his/her son/daughter take part in dissections, please notify the student's teacher in writing within two weeks of the start of class.*

***FAMILY AND  
CONSUMER  
SCIENCES  
DEPARTMENT***

**FOODS AND NUTRITION 1** 2.5 CREDITS

**Prerequisite:** Grade 12 One Semester

An introductory course designed to familiarize students with the preparation of basic nutritious foods. Quick breads, cookies, yeast breads, pies and cakes will be introduced. (Practical Art)

**FOODS AND NUTRITION 2** 2.5 CREDITS

**Prerequisite:** Foods & Nutrition 1 One Semester

An advanced continuation of Foods and Nutrition 1. (Practical Art)

**PARENTING AND CHILD DEVELOPMENT**

**Prerequisite:** Grades 11-12 2.5 CREDITS

One Semester

This course is intended for those interested in teaching or

caring for children and those interested in child-related occupations. The four areas of child development (physical, emotional, social and cognitive) will be explored. (Practical Art)

## **TECHNOLOGY DEPARTMENT**

All courses involve hands-on activities and are vocational in nature. Safety glasses **MUST** be worn in areas of hazardous activity. A daily cleanup is required. Infractions will result in disciplinary action and/or removal from the activity with a loss of credit. Costs attributed to materials used and/or lost/broken tools must be paid prior to the last examination. (Practical Art)

**AUTO TECHNOLOGY 1** 2.5 CREDITS  
**Prerequisite:** None One Semester  
Students will be introduced to the components of the automobile. Maintenance, emergencies, tune ups and the internal combustion engine are stressed. (Practical Art)

**AUTO TECHNOLOGY 2** 5 CREDITS  
**Prerequisite:** C- in Auto Technology 1 and Full Year  
teacher recommendation

A continuation of Auto Tech 1. Students will learn advanced skills, including the use of computers and sensors. Auto body repairs, as well as mechanical procedures, are introduced. (Practical Art)

**AUTO TECHNOLOGY 3** 5 CREDITS  
**Prerequisite:** C- in Auto Technology 2 and Full Year  
teacher approval

A continuation of Auto Tech 2. Individualized instruction in student selected projects. Students perform procedures similar to those in established auto repair shops. (Practical Art)  
NN

**ENGINEERING DRAWING** 5 CREDITS  
**Prerequisite:** None Full Year  
A basic course in mechanical drawing skills. Line weight, identification, dimensioning techniques, three-view drawing, and basic blueprint reading are covered. Computer-aided drafting is an integral component. (Practical Art)

**ELEMENTS OF DESIGN** 5 CREDITS  
**Prerequisite:** B in Engineering Drawing Full Year  
A review of drafting skills and geometric construction. Self-expression is provided through the design of a student-oriented project. Activities will be centered on computer generated drawings. (Practical Art)

**ARCHITECTURAL DESIGN** 5 CREDITS  
**Prerequisite:** B in Engineering Drawing Full Year  
House construction components are studied in this course. Footings, foundations, framing and roof construction are examined. Students develop the ability to read and interpret drawings prepared by others. Computer-aided drafting equipment will be used. (Practical Art)

**ADVANCED ARCHITECTURAL DESIGN** 5 CREDITS  
**Prerequisite:** Architectural Design Full Year  
An advanced continuation of Architectural Design. Students will work on floor plans, foundation plans, plot plans, electrical plans, plumbing plans, front, side and rear elevations, interior details, stair details and wall sections. (Practical Art)

**ROBOTICS** 5 CREDITS  
**Prerequisite:** None Full Year  
Students will learn the basics of the designing, creating and programming of robots. Mathematical and scientific skills will be reinforced. Conditions to modern, real-world issues will be stressed. There will be various student competitions throughout the course. (Practical Art)

**WOOD 1** 2.5 CREDITS  
**Prerequisite:** None One Semester  
An introductory course in woodworking skills. Hands on techniques in hand/power tool operation through construction of projects is stressed. (Practical Art)

**WOOD 2** 5 CREDITS  
**Prerequisite:** Wood 1 and teacher Full Year  
recommendation

A continuation of Wood 1. Development of entry-level skills within the carpentry trade. Opportunities to develop skills for personal use and to make a successful transition from school to the workplace will be emphasized. (Practical Art)

**WOOD 3** 5 CREDITS  
**Prerequisite:** Wood 2 and teacher Full Year  
recommendation

A continuation of Wood 2. Advanced construction techniques related to cabinetry and residential and commercial constructions are highlighted. Specific areas such as kitchens, bathrooms and remodeling will be emphasized as well. (Practical Art)

## **WORLD LANGUAGE DEPARTMENT**

**SPANISH 1 / FRENCH 1** 5 CREDITS  
**Prerequisite:** None Full Year  
Students will master the basic skills of listening, speaking, reading and writing in the target language. An appreciation of the culture, mores and civilization of the language is also introduced.

**SPANISH 2 / FRENCH 2** 5 CREDITS  
**Prerequisite:** Successful completion of Full Year  
the Level 1 course

A continuation of level 1. A reinforcement of the skills learned in the level 1 course, including an emphasis on the development of fluency in the language.

**SPANISH 3 / FRENCH 3** 5 CREDITS

**Prerequisite:** Teacher recommendation; B+ for semester one Full Year

A continuation of level 2. A further development of aural, oral and reading skills. Literary short stories and novellas are introduced.

**This course is being offered in conjunction with Middlesex County College. If you choose to obtain college credits for this course, you will be required to pay a nominal fee to the college for obtaining these credits**

**SPANISH 4 / FRENCH 4** 5 CREDITS

**Prerequisite:** B in Level 3; teacher recommendation; B+ for semester one Full Year

A continuation of level 3. Conversation and an appreciation of literature in the target language are emphasized.

**This course is being offered in conjunction with Middlesex County College. If you choose to obtain college credits for this course, you will be required to pay a nominal fee to the college for obtaining these credits**

**ADVANCED PLACEMENT SPANISH** 5 CREDITS

**Prerequisite:** B for Semester 1 Level 4 and teacher recommendation Full Year

Students who have indicated a level of fluency will be eligible for the course. The curriculum is geared to the development of the advanced language skills necessary to prepare for the Advanced Placement Examination.

***ADDITIONAL OFFERINGS***

**AIR FORCE JUNIOR ROTC** 5 CREDITS

**Prerequisite:** None Full Year

This course will apply principles of science learned in other courses such as earth science, biology, chemistry and physics.

The major units covered include: the aerospace environment, the human requirements of flight, the principles and physics of aircraft flight, weather, and navigation. Students are provided detailed instruction on ceremonial performances and protocol for civilian and military events and have the opportunity to personally learn drill. Most of the work will be hands-on. Students WILL wear the Air Force JROTC uniform weekly on the designated uniform day and the issued PT uniform on Fridays. (Practical Art)

**APEX LEARNING: INDIVIDUAL ONLINE COURSES FOR CREDIT**

**Prerequisite:** Grade 12 (see below for prerequisites for specific courses)

Apex Learning offers rigorous, standards-based online courses that meet high school graduation requirements. These courses provide students the option to take one of their courses virtually to meet the occasional scheduling conflict, or to provide an online course in a subject area not currently offered in the traditional classroom setting. Apex Learning offers a comprehensive course catalog and subject certified teachers. The following courses are currently available:

Semester Courses: 2.5 Credits Full Year Courses: 5 Credits  
AP Government and Politics German  
AP Macroeconomics\* Latin  
AP Microeconomics\* Mandarin Chinese

AP Psychology\*\*  
College and Career Prep  
Media Literacy  
Multicultural Studies  
Skills for Health  
Sociology

\*Successful completion of Economics is the prerequisite for AP Macroeconomics and AP Microeconomics.

\*\* Successful completion of Psychology is the prerequisite for AP Psychology.

**FUTURE EDUCATORS ACADEMY  
FEA**

The Sayreville War Memorial High School Academy for future careers in education provides a focused course sequence that appeals to students who are interested in exploring a future in education. FEA is designed to prepare students for multiple opportunities within the profession of education. It is a career driven academy for SWMHS students, starting with electives in grades nine and ten. As upperclassmen, the program will focus on how to design an instructional plan, choose teaching strategies, and measure whether learning has taken place through the Tomorrow's Teachers course where academy students gain field experience throughout the Sayreville School District and surrounding communities. **Students may apply for acceptance to FEA in the Spring of 9<sup>th</sup> grade.**

Students in the FEA program will be eligible to gain college credit through Fairleigh Dickinson University, Kean University, Rider University, and Stockton University.

**FUTURE EDUCATORS ACADEMY COURSE OF STUDY**

**Grade 10**

Communicating in the 21 <sup>st</sup> Century	2.5 Credits 1 Semester
Children's Literature	2.5 Credits 1 Semester

**Grade 11**

Parenting and Child Development	2.5 Credits 1 Semester
Introduction to Tomorrow's Teachers	2.5 Credits 1 Semester

**Grade 12**

FEA- Tomorrow's Teachers	5 Credits Full Year
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## **CHILDREN'S LITERATURE**

**Prerequisite: None**

2.5 CREDITS One Semester

Children's literature will be used to explore a variety of genres and give students the opportunity to explore popular with a fresh perspective.

## **COMMUNICATING IN 21<sup>ST</sup> CENTURY**

**Prerequisite: Grade 11**

2.5 CREDITS One Semester

Communicating in the age of the internet and social media is the main focus of this course. Students will explore blogging, emailing, and social media posting and online research as well as digital citizenship and public speaking. (Practical Art)

## **PARENTING AND CHILD DEVELOPMENT**

**Prerequisite: Grade 11-12**

2.5 CREDITS One Semester

This course is intended for those interested in teaching or caring for children and those interested in child-related occupations. The four areas of child development (physical, emotional, social and cognitive will be explored. (Practical Art)

## **INTRODUCTION TO TOMORROW'S TEACHERS**

**Prerequisite: Grade 11**

2.5 CREDITS One Semester

B+ or above in Children's Literature or Communicating in the 21<sup>st</sup> Century; Students enrolled in the Future Educators Academy will be given preference. This course will provide students who may be interested in pursuing a career in education with a chance to learn more about the profession. This course will expose students to teaching and learning of various public education settings including early childhood, elementary, middle, and high school as well as the education services.

## **FEA: TOMORROW'S TEACHERS**

**Prerequisite: Grade 12**

5 CREDITS

**B+ of above in Into to Tomorrow's Teachers and department approval.**

An Honors course that studies the history, development, organization and practice of preschool, elementary, and secondary education. Students will learn about educational theory, teaching techniques/strategies, as well as student learning needs and styles. Students will be placed in actual Pre-K to grade 6 classrooms for the opportunity to observe the day to day operations of a school environment as well as apply knowledge learned in the course supervised by a cooperating teacher.

## **SAYREVILLE HIGH SCHOOL BUSINESS ACADEMY: SBA TO EMPOWER STUDENTS TODAY, TO BE FUTURE BUSINESS LEADERS OF TOMORROW**

The Sayreville War Memorial High School Business Academy provides a school to college or school to career preparation for multiple careers in business through a core curriculum

emphasizing leadership, marketing, management, strategic thinking, problem solving, volunteerism, and the opportunity to earn college credit and competitive experience.

Students in the Business Academy are offered multiple club opportunities like DECA, FBLA and NBHS; through which they can connect with their peers, grow their skills to emerge as leaders and entrepreneurs for careers in marketing, finance, hospitality, and management through competitive events and real-world experiences.

The Sayreville Business Academy also has an Articulation Agreement through Middlesex County College where students earn college credits in Financial Accounting Honors.

Students in the Business Academy are able to gain Structured Learning Experiences through the Co-Op program where they are hired by the school district and many of the businesses in the local community. This program assists students to make the school-to-work transition, service learning and experiential learning initiatives.

Business-persons are regular visitors to the classroom to provide real world knowledge and experience consisting of guest speaking and mentorships for Business Academy students. Throughout the academy, there are opportunities to take part in job shadows (day at a business), office visits, and field trips to expose students to the world of work and industries.

## **STRUCTURED LEARNING EXPERIENCE**

**2.5 credits One Semester**

**Prerequisite: Must be recommended by Child Study Team**

The Structured Learning Experience (SLE) provides students experiential, supervised, in-depth learning experiences. It is designed to offer students the opportunity to explore career interests, in and around the school setting. The course allows for multiple hands on opportunities, including but not limited to on-campus work experiences, job shadowing and field trips. The overall goal will be to develop 21<sup>st</sup> century life and career skills which will enable students to make informed decisions that prepare them to engage as active citizens in a global society, and to successfully meet the challenges and opportunities of the 21<sup>st</sup> century global workplace. Experience within the school setting will prepare students for Community Based Instruction course and/or the workplace by exposing them to the skills necessary to become a worker in the dynamic global society.

## **NJDOE SEAL OF BILITERACY**

The SWMHS proudly offers all juniors and seniors the opportunity to earn the NJDOE Seal of Biliteracy on their diploma by demonstrating literacy proficiency in English as well as one of the over a dozen other languages. The assessment is offered for a nominal fee annually each January. Currently we are working with Avant Assessment in administering the STAMP4S examination. Interested students can contact Kimberly.Grossman@Sayrevillek12.net

## SAYREVILLE WAR MEMORIAL HIGH SCHOOL

### BUSINESS ACADEMY

TO EMPOWER STUDENTS OF TODAY.

TO BECOME BUSINESS LEADERS OF TOMORROW



A SWMHS student can major in one of the two following strands:

Accounting

Marketing

### **ACCOUNTING STRAND**

SWMHS students majoring in Accounting will take the following courses.

- Business Organization and Management
- Financial Literacy in the 21<sup>st</sup> century
- Financial Accounting Honors
- Managerial Accounting
- Capstone

### **BUSINESS ORGANIZATION AND MANAGEMENT**

**Prerequisite: None      Grades 9-12      2.5 Credits**

An introduction to business. Students will learn principles of business organization. Areas include money, insurance, budgeting, government and industry. (Practical Art)

### **FINANCIAL LITERACY IN THE 21ST CENTURY**

**Prerequisite: None      Grades 9-12      2.5 Credits**

Students are given a basic understanding of personal finance along with the principles of credit, interest, debt, checking, savings and taxes. Areas to be highlighted include the role of the government, money and banking and comparative economic systems.

### **FINANCIAL ACCOUNTING HONORS**

**Prerequisite: B in Algebra 2      Grades 10-12      5 Credits**

Students will learn from a college level textbook and will be taught at an accelerated rate. Topics include preparation of financial statements, adjusting, closing and revising entries, inventory evaluation and fixed assets and depreciation. Microsoft Excel will be used. (Practical Art)

**This course is being offered in conjunction to Middlesex County College. If you choose to obtain college credits for this course, you will be required to pay a nominal fee to the college for obtaining these credits.**

### **MANAGERIAL ACCOUNTING HONORS**

**Prerequisite: B in Financial Accounting Honors  
Grades 11-12      2.5 Credits**

An introduction to the use of accounting information by managers. Topics include the use of accounting information for planning and control, performance evaluation, decision-making, and the statement of cash flows, along with financial statement analysis. (Practical Art)

### **CAPSTONE**

**Prerequisite: None      Grades 12      2.5 Credits**

This course is offered to students who are enrolled in the CTE Accounting Track and the students who are enrolled in the Business Academy. This course engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, student practice reading and analyzing articles, research studies, and foundational, literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances.

### **Project Requirements for SBA and Externship Capstone Project– Accounting Major**

1. One Simulation project in Business Organization and Management
2. CTE Industrial Certification
3. Capstone week in May / June, each SBA senior delivers an oral presentation of their externship experience to fellow members of the Academy.

## **MARKETING STRAND**

SWMHS students majoring in Accounting will take the following courses.

- Business Organization and Management
- Financial Literacy in the 21<sup>st</sup> century
- Essentials of Marketing 1
- Essentials of Marketing 2
- Sports and Entertainment Marketing
- Capstone

### **BUSINESS ORGANIZATION AND MANAGEMENT**

**Prerequisite: None      Grades 9-12      2.5 Credits**

An introduction to business. Students will learn principles of business organization. Areas include money, insurance, budgeting, government and industry. (Practical Art)

### **FINANCIAL LITERACY IN THE 21ST CENTURY**

**Prerequisite: None      Grades 9-12      2.5 Credits**

Students are given a basic understanding of personal finance along with the principles of credit, interest, debt, checking, savings and taxes. Areas to be highlighted include the role of the government, money and banking and comparative economic systems.

### **ESSENTIALS OF MARKETING 1**

**Prerequisite: B in English 9**

**Grades 10-12      2.5 Credits**

Preparing students for marketing occupations involving complex duties and decision making processes. Students are expected to participate in DECA, the student organization. (Practical Art)

### **ESSENTIALS OF MARKETING 2**

**Prerequisite: Essentials of Marketing 1**

**Grades 10-12      2.5 Credits**

An overview of the field of marketing and the marketing concept. Students develop an understanding of the growing importance of the consumer, difference between industrial and consumer marketing, the impact of government and environment on marketing, and the basic marketing functions of product planning, marketing channels, physical distribution, promotion, pricing, and marketing research.

### **CAPSTONE**

**Prerequisite: None      Grades 12      2.5 Credits**

This course is offered to students who are enrolled in the CTE Accounting Track and the students who are enrolled in the Business Academy. This course engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, student

practice reading and analyzing articles, research studies, and foundational, literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances.

### **Project Requirements for SBA and Externship Capstone Project– Marketing Major**

1. One Simulation project in Business Organization and Management
2. CTE Industrial Certification
3. Capstone week in May / June, each SBA senior delivers an oral presentation of their externship experience to fellow members of the Academy.

### **National Business Honors Society**

After the first two years in the Business Academy, students can qualify for the SWMHS chapter of National Business Honors Society. The standards of the N.B.H.S

- Student must be a high school junior or senior
- Student must have completed or be enrolled in his/her third business course
- Student must have a minimum standard overall GPA of 3.0
- Student must have a GPA average of 3.5 in Business Courses
- Student must complete an essay that best describes the character
- Student must complete the leadership/service activities/ employment history

## **Externship Experience**

**(Open to sophomores only)**

### **RUTGERS UNIVERSITY BUSINESS FOR YOUTH THE RUBY PROGRAM**

(RUBY) program is to provide high school students with an experiential learning opportunity to supplement the teachings in their high school business program and prepare them for college. The goal of the experiential learning experience through the RUBY Program is to provide the following:

1. Adequate exposure within (as well as beyond) the students' school environment, to the potential business opportunities
2. Potential rewards to motivate the students to take advantage of these opportunities
3. Resources the students need to become successful business leaders.

The RUBY Program involves a business plan competition, on-campus classes (including college preparation lessons), visits to corporate facilities, interaction with current Rutgers Business School students (mentor relationships), soft skills development (i.e., team building, interviewing and presentation skills), and involvement of parents which will develop direction towards a "culture" of high performance.

## STEM Academy Course of Study

(Also Required: 2.5 credits Financial Literacy through an online or summer course for Biomedical)

### Grade 9

English  
Biology Honors  
Geometry Honors or Algebra II Honors  
World History CP/H

PE/Health  
Visual/Performing Arts Elective(s)  
World Language  
Engineering Drawing or Robotics  
(Engineering Strand)

### Grade 10

#### Biomedical

English  
Alg II H or PreCalc H  
US Hist I CP/H or APUSH I  
PE/Health  
Chemistry H  
AP Biology  
World Language

#### Engineering

English  
Alg II H or PreCalc H  
US Hist I CP/H or APUSH I  
PE/Health  
Chemistry H  
World Language  
Intro to Engineering (semester)  
Visual/Performing Art

#### Computer Science

English  
Alg II H or PreCalc H  
US Hist I CP/H or APUSH I  
PE/Health  
Chemistry H  
World Language  
Intro to Comp Sci/Adv Concepts

### Grade 11

#### Biomedical

English  
PreCalc H, Calc H, or AP Calc  
US Hist II CP/H or APUSH II  
PE/Health  
Physics H  
AP Chem  
World Language

#### Engineering

English  
PreCalc H, Calc H, or AP Calc  
US Hist II CP/H or APUSH II  
PE/Health  
Physics H  
World Language  
AP Chem or AP Enviro Sci

#### Computer Science

English  
PreCalc H, Calc H, or AP Calc  
US Hist II CP/H or APUSH II  
PE/Health  
Physics H  
World Language  
AP Computer Principles

### Grade 12

#### Biomedical

English  
AP Calc or AP Cal BC  
PE/Health  
AP Science or Math  
Anatomy & Physiology H  
Practical Art(s)  
Science Leadership (1 credit)  
Research in Science (2 credits)  
Externship (2 days per week)

#### Engineering

English  
AP Calc or AP Cal BC  
PE/Health  
AP Science  
Adv. Arch. Design  
Financial Lit/Elective  
Science Leadership (1 credit)  
Research in Science (2 credits)  
Externship (2 days per week)

#### Computer Science

English  
AP Calc or AP Cal BC  
PE/Health  
AP Science  
AP Computer Science  
Financial Lit/Elective  
Science Leadership (1 credit)  
Research in Science (2 credits)  
Externship (2 days per week)