## SOMERSET-BERKLEY REGIONAL HIGH SCHOOL SOMERSET, MASSACHUSETTS

# COURSE DESCRIPTIONS 2011-2012

Departmental Areas:	Pages:
Advanced Placement Program	3
Art	25-27
Business Technology	21-22
English Language Arts and Reading	6-8
Engineering Technology	22-25
Graduation Requirements	5
Mathematics	12-16
Media Center	32
Mission Statement	4
Music	27-30
Science	16-19
Social Studies	8-12
Special Education	3
Wellness	31-32
World Languages	19-21
Virtual High School	32

#### NON-DISCRIMINATION STATEMENT

The Somerset-Berkley Regional School District does not discriminate in admission to, access to, treatment in, or employment in its services, programs and activities, on the basis of race, color or national origin, in accordance with Title VI of the Civil Right Act of 1964 (Title VI); on the basis of sex, in accordance with Title IX of the Education Amendments of 1972; on the basis of age, in accordance with the Age Discrimination in Employment Act of 1975 (Age Discrimination Act); on the basis of domicile in accordance with Title VIIB of the McKinney-Vento Homeless Assistance Act of 2001; on the basis of native language in accordance with the No Child Left Behind Act of 2001, on the basis of disability, in accordance with Section 504 of the Rehabilitation Act of 1973 (Section 504) and Title II of the Americans with Disabilities Act of 1990 (ADA); or on the basis of sexual orientation or religion in accordance with Mass. Gen. Laws, Chapter 71 and 151B.

To file a complaint alleging discrimination or harassment by Somerset-Berkley Regional High School on the basis of race, color, national origin, sex, age, domicile, native language, sexual orientation, or religion or to make inquiry concerning the application of Title VI, Title VII, Title IX, the Age Discrimination Act, and their respective implementing regulations, please contact:

Richard W. Medeiros, Superintendent of Schools Somerset Public Schools 580 Whetstone Hill Road Somerset, MA 02726 Telephone: (508) 324-3100

To file a complaint alleging discrimination or harassment by Somerset-Berkley Regional High School on the basis of disability or to make inquiry concerning the application of Section 504 and the ADA and their respective implementing regulations, please contact:

Susan Doe Director of Special Education Somerset Public Schools 580 Whetstone Hill Road Somerset, Ma 02726 Telephone: (508) 324-3100

Telephone: (508) 324-3100

Inquiries concerning the applicability of the aforementioned federal laws and regulations to Somerset-Berkley Regional High School may also be referred to the U.S. Department of Education, Office of Civil Rights (OCR), 33 Arch Street, Ninth Floor, Boston, MA 02110, telephone number (617) 289-0111, Fax (617) 289-0150.

#### SPECIAL EDUCATION

Somerset-Berkley Regional High School adheres to Federal Law and State Regulations when identifying, evaluating, and serving students who are experiencing difficulty accessing the curriculum effectively. When it becomes clear that a student may require specially-designed instruction and/or related services, parent consent is sought and assessments are conducted in the area of suspected need.

When reports become available, an Evaluation Team meets to review assessment and testing results, determine the student's eligibility for special education services, and develop an Individual Education Plan (IEP), if warranted.

A continuum of special education service exists in the high school ranging from the assistance that is provided in the general education classroom, to supportive lessons in instructional strategies offered in a resource room setting. Instruction in academic subject areas in a special education class with a pre-vocational and work study component is available for those students deemed appropriate by their Evaluation Team.

#### SECTION 504 OF THE AMERICANS WITH DISABILITIES ACT

Section 504 is an Act which prohibits discrimination against persons with a disability in any program receiving Federal financial assistance. The Act defines a person with a disability as anyone who:

has a mental or physical impairment which substantially limits one or more major life activity (major life activities include activities such as learning, walking, seeing, hearing, speaking, breathing, caring for one's self, performing manual tasks and working); has a record of such impairment; or is regarded as having such an impairment

In order to fulfill the obligations under Section 504, Somerset-Berkley Regional High School recognizes a responsibility to avoid discrimination in policies and practices regarding this personnel and students. No discrimination against a person with a disability will knowingly be permitted in any of the programs and practices in the school.

The school has specific responsibilities under the Act, which include the responsibility to identify, evaluate, and if the child is determined to be eligible under Section 504, to afford access to appropriate education services.

## ADVANCED PLACEMENT PROGRAM

#### The Program

The Advanced Placement Program <sup>®</sup> is a cooperative educational endeavor between secondary schools and colleges and universities. Since its inception in 1955, the Program has provided motivated high school students with the opportunity to take college-level courses in a high school setting. Students who participate in the Program not only gain college-level skills, but in many cases they also earn college credit while they are still in high school. AP courses are taught by dedicated and enthusiastic high school teachers who follow course guidelines developed and published by the College Board.

The Program's success is rooted in the collaborative efforts of motivated students, dedicated teachers, and committed schools. By participating in the Program, secondary schools make the commitment to organize and support at least one class that is equivalent to a first-year college course.

#### The Audit

The AP Course Audit was created at the request of secondary school and college members of the College Board who sought a means for the College Board to:

provide teachers and administrators with clear guidelines on curricular and resource requirements that must be in place for AP courses; and

help colleges and universities better interpret secondary school courses marked "AP" on students' transcripts.

All schools wishing to label a course "AP" as of the 2007-2008 school year must complete and return the subject-specific AP Course Audit form (available January 2007), along with the course syllabus, for each teacher of that AP course. Within two months of submitting AP Course Audit materials, schools will receive authorization for qualifying courses to use the "AP" designation on student transcripts. Each fall, beginning in 2007, colleges and universities will receive a ledger of schools that lists the courses authorized to use the "AP" designation at each school.

Information taken from apcentral.collegeboard.com and AP® Course Audit Manual

# Somerset-Berkley Regional High School's Mission Statement and Expectations for Student Learning

Safe and secure environment High level of academic expectations Socially responsible and active citizens

Somerset-Berkley Regional High School, in partnership with parents and the community, maintains **high expectations for academic achievement** for a student body with a diverse range of abilities and interests. In a student-focused environment, our school provides opportunities for all students to achieve their full potential and become lifelong learners. We provide a **safe and secure environment** that addresses students' emotional, physical, and social needs. Somerset-Berkley Regional High School prepares students to become **socially responsible citizens** and **active** participants in their community.

## **Academic Expectations:**

Students at Somerset-Berkley Regional High School will:

- 1. Come to school prepared and ready to learn.
- 2. Develop and employ effective study skills.
- 3. Read, write, and communicate effectively.
  - Read widely and critically for a variety of purposes
  - Write clearly, concisely, and persuasively
  - Communicate ideas and information effectively in an oral presentation.
- 4. Self-evaluate and reflect on their learning using a variety of methods.
- 5. Explore, develop, and express their creativity.
- 6. Solve problems by reasoning critically and creatively.
- 7. Assimilate, analyze, interpret, and evaluate information critically to become capable researchers.
- 8. Demonstrate technological literacy as a tool for learning, research, and communication.

## **Social Expectations:**

Students at Somerset-Berkley Regional High School will:

- 1. Demonstrate pride and respect for themselves and others.
- 2. Accept responsibility for their behavior and actions as outlined by the Student/Parent Handbook.

## **Civic Expectations:**

Students at Somerset-Berkley Regional High School will:

- 1. Comprehend and fulfill the requirements of good citizenship while developing a sense of their personal and community responsibility.
- 2. Contribute responsibly to endeavors beyond the classroom through independent ventures and/or school sponsored activities.

## **Somerset-Berkley Regional High School Graduation Requirements**

## Students should carefully review the requirements before registering for courses

### **Core Requirements**

English	4 years:	English I, II, III, & IV	(24 credits)
---------	----------	--------------------------	--------------

**Social Studies** 3 years: Early U.S. History, Modern

U.S. History, World History (18 credits)

Mathematics3 years:Any combination(18 credits)Science3 years:Any combination(19 credits)Physical Education4 years(8 credits)Health I & II2 semesters(2 credits)

Fine & Performing Arts 6 credits: Any combination Computer/Technology Education 6 credits: Any combination

**Total credits needed to graduate** 144 credits: Core requirements (above) plus electives

### In addition, students must pass MCAS.

### New Graduation Requirement beginning with the Class of 2014

Students will be required to complete 20 service hours over four years as a requirement for graduation from Somerset-Berkley Regional High School. The community service project provides students with the opportunity to engage in active learning while developing good citizenship. Through the use of the instructional tool of community service, students will participate in service experiences that meet actual community needs. Students will explore aspects of civic engagement, as well as factors in creating and sustaining healthy communities. While completing the requirements of the community service project, students will also explore their identity in relation to the greater community. The community service project will be monitored by the assistant principals.

## Requirements for Progression to Next Course in the Sequence

- Students must receive a minimum grade of 65 to proceed to the next course.
- Students with grades of 65-69 should attend summer school, pass with a 70 or higher and earn a C- on their transcript. Students who do not attend summer school may be advised to drop to a lower level in the course sequence.
- Students with failing grades of 50-64 should go to summer school and pass with 70 or higher to bring the final grade on the high school record to 65 and earn 6 credits. Failure to attend or pass summer school will require the student to repeat the course the next school year. If applicable, students will be advised to drop to a lower level in the course sequence.
- Students with a final average below 50 must retake the course the following year. The students may be advised to drop to a lower level in the course sequence. Summer school will not earn any credit or grade change; however, the student may enroll in summer school for remedial skill development.
- To advance to a higher level in any course, it is strongly recommended that students earn a grade of A- at the present level of study.

#### ENGLISH LANGUAGE ARTS AND READING

The English and Reading Department has adopted Academic Expectations 3 and 7.

- 3. Read, write, and communicate effectively.
  - Read widely and critically for a variety of purposes
  - Write clearly, concisely, and persuasively
  - Communicate ideas and information effectively in an oral presentation.
- 7. Assimilate, analyze, interpret, and evaluate information critically to become capable researchers.

#### COURSE OFFERINGS:

## **English I**

Grade 9

Level 1 110100

This accelerated course will serve as the foundation for all college preparatory English study at Somerset-Berkley Regional High School. This introductory course will focus on the reading of traditional and contemporary literature. Particular emphasis will be placed upon the development of skills needed by students to become independent readers and writers. Students will begin their mastery of the following skills: analysis of literature, critical thinking and reading, understanding literature and the writing process. Students electing to take Level 1 are expected to be highly independent, self-motivated and organized learners. Time will be devoted to MCAS preparation. **Students should have earned a score of ADVANCED on the ELA MCAS.** 

Level 2 120100

This course will serve as the foundation for all college preparatory English study at Somerset-Berkley Regional High School. This introductory course will focus on the reading of traditional and contemporary literature. Particular emphasis will be placed upon the development of skills needed by students to become independent readers and writers. Students will begin their mastery of the following skills: analysis of literature, critical thinking and reading, understanding literature and the writing process. Time will be devoted to MCAS preparation.

Level 3 130100

This course will focus on intensive development of basic reading and composition skills. Selections from high interest materials will supplement the short stories, poems, and plays contained in the assigned classroom text. Novels written on a level commensurate with student ability will be assigned on a regular basis. Vocabulary words will be taught each week in structured lessons that will ensure retention. Composition skills will be reinforced in process oriented classes. The steps for prewriting, drafting, and revising will be incorporated into all composition assignments. Time will be devoted to MCAS preparation.

## English II

Grade 10

Level 1 210100

This accelerated course chronologically surveys American literature from the pre-colonial period to the present. Students will continue their mastery of the following skills: analysis of literature, critical thinking and reading, understanding language, and the writing process. Students are challenged to read and analyze literary selections from a humanistic approach that regards literature in context with the history, the arts, and literary movements of the time period. Grammar, vocabulary, and composition are taught utilizing a whole language method that incorporates skill instruction with the literature. Frequent formal writing assignments and oral presentations are required. Time will be devoted to MCAS preparation. **Students should have earned a grade of B or better in 9<sup>th</sup> grade Level 1 English.** 

Level 2 220100

This college preparatory course surveys American Literature from the pre-colonial period to the present. Students will analyze the writers' techniques found in the literary genres of the short story, non-fiction, poetry and the novel. Students will study each literary selection on three levels of comprehension: literal, interpretative and applied. Along with critical thinking and reading skills, the literature based program incorporates vocabulary, writing and grammar skill development. Frequent formal writing assignments and oral presentations are required. Time will be devoted to MCAS preparation.

Level 3 230100

In this course, language arts and communication skills are developed with special emphasis on listening, reading, speaking, thinking and writing. The fundamental concepts of grammar and composition are presented in relation to their impact on effective oral and written communication. Weekly composition assignments, based on the reading of selections from fine literature will focus on the development of composition skills. Weekly vocabulary study increases students' effectiveness in communicating ideas accurately. There is also a writing supplement which gives intense focus on the writing process. Time will be devoted to MCAS preparation.

## English III Grade 11

#### Level 9 AP English Language and Composition

390100

In this Advanced Placement Course, students will study British Literature and the art of rhetoric. Students will be able to analyze writers' rhetorical and linguistic choices as well as apply different rhetorical and linguistic strategies to their own writing. Students will read from a variety of prominent English language autobiographers, diarists, political writers, biographers, historical writers, essayists, fiction writers and literary critics. The completion of extensive summer assignments is a requirement of this course.

Please do not elect this course if you are unwilling to complete the summer assignments. Students should have earned a grade of A- or better in 10<sup>th</sup> grade Level 1 English and must take a writing placement examination. All students are required to take the AP exam.

Level 1 310100

This course emphasizes the reading and appreciation of the literature of Great Britain. Students will be encouraged to think and read critically by focusing on the literature in its historical context from the Anglo-Saxon Period through contemporary writers. Grammar, vocabulary and composition are taught using a whole language method. An extensive research project is required. Time will be devoted to SAT preparation. **Students should have earned a grade of B or better in 10**<sup>th</sup> **grade Level 1 English.** 

Level 2 320100

This college preparatory course surveys British literature from the Anglo-Saxon through the contemporary times. Students will continue their mastery of literary analysis, critical thinking and critical reading. Grammar, vocabulary and composition are taught using the whole language approach. Writing assignments will become more frequent and more challenging. A research project is required. Time will be devoted to SAT preparation.

Level 3 330100

Students in this class are expected to accomplish a number of diverse tasks that will prepare them for further education or post-graduation employment. Students write plot summaries, character sketches, and mini paragraphs. Informal essays and term book reports are a requirement. A loose-leaf notebook must be kept throughout the year.

# English IV Grade 12

### Level 9 AP English Literature and Composition 490

In this Advanced Placement Course, students will read and analyze some of the most prominent poetry, drama, novels, short stories and essays written at various times and cultures with particular emphasis being on literature originally written in English. Through the close reading of selected texts, students will consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism and tone. The writing focus is the analytical essay about literature. Students will learn to sustain an argument while guiding a reader through well-organized evidence drawn from details of the text. The completion of extensive summer assignments is a requirement of this course. Please do not elect this course if you are unwilling to complete the summer assignments. Students should have earned a grade of A- or better in 11<sup>th</sup> grade Level 1 English and must take a writing placement examination. All students are required to take the AP exam.

Level 1 410100

The focus of this senior honors course is the study of world literature. Through this comparative approach, students will analyze major themes in literature such as justice, love, truth and identity. In addition to extensive reading, students will be required to produce a wide variety of writing assignments. The course will include vocabulary work, college essay preparation and a research project. **Students should have earned a grade of B or better in 11<sup>th</sup> grade Level 1 English.** 

Level 2 420100

The focus of this senior college preparatory course is the comparative study of world literature. Through this approach, students will analyze major themes in literature such as justice, love, truth and identity. In addition to outside reading, students will be required to refine their writing skills and techniques. The course will include vocabulary work, college essay preparation and a research project.

Level 3 430100

A major portion of this class will be dedicated to developing sound grammatical and rhetorical practices. Composition assignments will be assigned to address writing situations students will encounter in the workplace. Relevant literary selections gleaned from contemporary texts and periodicals will serve as the focus for literary analysis.

## **English Department Part-time Courses**

# Theatre Arts Grades 9-12

## 3 periods per cycle

620100

The Theatre Arts course is designed to introduce the beginning student to the fundamental aspects and conventions of world theatre. The course provides a historical survey of theatre to the present day, covers the technical aspects of theatre, and provides training in the various methods of acting. Included in the course is training in miming, puppetry, set design, character development, textual analysis, and dramatic performance. Students are expected and required to participate in extensive performance, dramaturgy, and culminating projects.

# Speech and Debate Grade 9-12

## 3 periods per cycle

620600

Students will learn the fundamentals of speech communication, research skills and the art of debate. They will listen to, deliver, discuss and respond to presentations of increasing complexity. These include introductory, informative, persuasive, interview, impromptu, tribute and process speeches.

## Mythology and Folklore Grade 10-12

## 3 periods per cycle

#### 620500

Myths and folktales have appealed to people of all ages for thousands of years. In this course, students will examine the roles that myths and folktales have played in people's lives since the first evidence of their existence through contemporary times. This course will offer students the opportunity to study and interpret myths, folktales and fairy tales from a variety of cultures and respond creatively to them. In addition to frequent and various writing assignments, students will be required to perform a variety of performance based projects.

## Journalism Grades 9-12

## 3 periods per cycle

#### 600200

This mini course is designed to introduce students to journalism. Students will use models of good writing to determine techniques that good writers use and will apply these techniques while developing writing portfolios. Students will study the history of journalism, conduct independent research and interviews, investigate student press laws and ethics and examine the skills needed to write for a newspaper. During the third term, students will create their own newspaper. During the fourth term, students will explore photojournalism.

# Reading Grades 9-12

## Various periods per cycle

#### 600212

Tutorial reading services provide individualized instruction fro students needing intensive and specialized help. Reinforcement is provided in improving vocabulary, word attack skills, reading comprehension, study and work skills, listening and fluency and other specific literacy skills. Homework is assigned frequently. Upon completion of a diagnostic assessment, personalized reading planes are prepared by a reading specialist. Class sizes are small to accommodate personal student/teacher interaction. Classes meet up to six periods per cycle depending upon the student's needs. Credit toward graduation is awarded based on successful completion and periods per cycle. Students will be graded upon a Satisfactory /Unsatisfactory basis.

## Literacy Lab 1 Grade 9, 10 2 periods per cycle

Literacy Lab 2
Grade 11, 12
2 periods per cycle

502100

This class is offered to 9th and 10th grade students who can benefit from supplementary small-group instruction and practice in literacy skills. Students will develop reading strategies, vocabulary skills and effective writing techniques appropriate to the requirements of the Massachusetts Curriculum Frameworks.

This class is offered to 11th and 12th grade students who can benefit from supplementary small-group instruction and practice in literacy skills. Students will develop reading strategies, vocabulary skills and effective writing techniques appropriate to the requirements of the Massachusetts Curriculum Frameworks.

## English Language Arts Lab Grade 10

### 2 periods per cycle

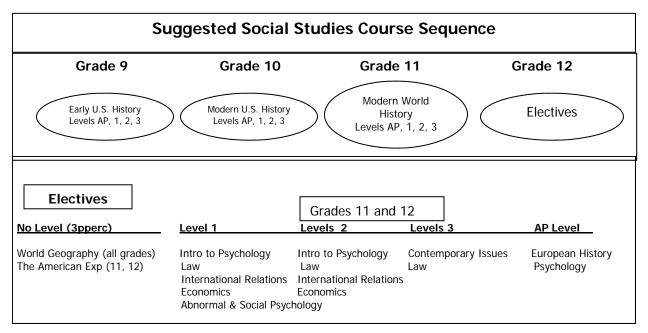
#### 500100

Language Arts Lab is a year-long class which meets twice per cycle. Grade 10 students are placed in the Lab on the basis of their English Language Arts score on the Massachusetts Comprehensive Assessment System (MCAS) test. In preparation for the next test administration, students practice vocabulary, reading comprehension, and writing skills as well as test-taking strategies. Special attention is paid to areas where a need for improvement was indicated by previous test scores.

## **SOCIAL STUDIES**

The Social Studies Department has adopted Academic Expectations 3 and 7.

- 3. Read, write, and communicate effectively.
  - Read widely and critically for a variety of purposes
  - · Write clearly, concisely, and persuasively
  - Communicate ideas and information effectively in an oral presentation.
- 7. Assimilate, analyze, interpret, and evaluate information critically to become capable researchers.



#### **COURSE OFFERINGS:**

# U.S. History & Government before 1877 with document readings (AP) Grade 9

Level 9 190101

In this course, students will engage in a comprehensive and in-depth analysis of political, social, economic, diplomatic, intellectual and cultural aspects of U.S. history from colonial times to the end of the Reconstruction period. Based on primary and secondary sources, this course utilizes extensive document readings that enhance students' comprehensive reading of the text. Students should expect this course to demand a more detailed approach than may have been necessary in World History. Students will develop skills in historical interpretation, oral argument, and writing and research in preparation for the United States History Advanced Placement Exam, which will be taken in the spring of grade 10 for Class of 2012 and grade 11 for Class of 2011.

# U.S. History & Government 1763-1877 with document readings Grade 9

Level 1 110101

Students will examine the historical and intellectual origins of the United States during the Revolutionary and Constitutional eras. Students will study the basic framework of American democracy and the basic concepts of American government, as well as America's westward expansion, the establishment of political parties, economic and social change, sectional conflict, the Civil War and Reconstruction. Students will be required to interpret and analyze substantial primary source and supplemental readings, sometimes independently.

Level 2 120101

Students will examine the historical and intellectual origins of the United States during the Revolutionary and Constitutional eras. Students will study the basic framework of American democracy and the basic concepts of American government, as well as America's westward expansion, the establishment of political parties, economic and social change, sectional conflict, the Civil War and Reconstruction. Students will be required to interpret and analyze primary and secondary source readings.

Level 3 13010

Students will examine the historical and intellectual origins of the United States during the Revolutionary and Constitutional eras. Students will study the basic framework of American democracy and the basic concepts of American government, as well as America's westward expansion, the establishment of political parties, economic and social change, sectional conflict, the Civil War and Reconstruction. Students will be introduced to the interpretation and analysis of primary source documents.

# U.S. History & Government from 1877 with document readings (AP) Grade 10

Level 9 290101

In this rigorous college course students will engage in a comprehensive and in-depth analysis of the political, social, economic, diplomatic, intellectual, and cultural forces that influenced the United States from the end of the Reconstruction period to the present. Based on primary and secondary sources, this course utilizes extensive document readings that enhance students' comprehensive reading of the text. Students will develop skills in historical interpretation, oral argument, and writing and research in preparation for the United States History Advanced Placement Exam which will be taken in the Spring. Prerequisite: Completion of U.S. History and Gov. 1763-1877, Level 9 and completion of a summer assignment. All students are required to take the AP exam

## U.S. History & Government from 1877 with document readings Grade 10

Level 1 210101

Students will analyze the causes and results of the Industrial Revolution and America's growing role in international relations. Students will also examine the goals and accomplishments of the Progressive and New Deal Eras and the various factors that led to America's entry into World War II as well as the effects of World War II on American life. In addition, students study the causes and events of the Cold War, social and economic and political changes during the Cold War such as the Civil Rights movement and recent events and trends that have shaped modern-day America. Student will be required to interpret and analyze substantial primary source and supplemental readings, sometimes independently.

#### Level 2 220101

Students will analyze the causes and results of the Industrial Revolution and America's growing role in international relations. Students will also examine the goals and accomplishments of the Progressive and New Deal Eras and the various factors that led to America's entry into World War II as well as the effects of World War II on American life. In addition, students study the causes and events of the Cold War, social and economic and political changes during the Cold War such as the Civil Rights movement and recent events and trends that have shaped modern-day America. Student will be required to interpret and analyze substantial primary source and secondary source readings.

Level 3 230101

Students will analyze the causes and results of the Industrial Revolution and America's growing role in international relations. Students will also examine the goals and accomplishments of the Progressive and New Deal Eras and the various factors that led to America's entry into World War II as well as the effects of World War II on American life. In addition, students study the causes and events of the Cold War, social and economic and political changes during the Cold War such as the Civil Rights movement and recent events and trends that have shaped modern-day America. Student will be introduced to the interpretation and analysis of primary source documents.

### **World History AP**

#### Grade 11

Level 9 490101

This course will follow the Advanced Placement World History curriculum and prepare students for the Advanced Placement exam. World history will be studied from 8,000 B.C.E to the present. Students will analyze and interpret a wide variety of challenging primary and secondary sources. All students are required to take the AP exam.

## **Modern World History**

#### Grade 11

Level 1 310101

This course will study the period from the French Revolution to the present time. Diversity of culture and political developments are emphasized. Students will be required to interpret and analyze substantial primary source and supplemental readings, sometimes independently.

Level 2 3200101

This course will study the period from the French Revolution to the present time. Diversity of culture and social, economic, and political developments are emphasized. Students will be required to interpret and analyze substantial primary source and supplemental readings.

Level 3 330101

This course will study the period from the French Revolution to the present time. Diversity of culture and social, economic, and political developments are emphasized. Students will be required to interpret and analyze substantial primary source and supplemental readings.

## Introduction to Psychology (AP)

#### **Grades 11, 12**

Level 9 390201

This course will follow the Advanced Placement Psychology curriculum and prepare students for the Advanced Placement exam. The Advanced Placement Psychology course involves an in-depth analysis of the biological foundations of the brain, perception, states of consciousness, thinking, language, motivation, learning, memory, personality theory, therapeutic techniques, and social psychology. Students will develop research and writing skills in preparation for the spring AP Psychology exam. All students are required to take the AP exam.

## Introduction to Psychology

#### Grades 11, 12

Levels 1, 2 310201, 320201

The purpose of this course is to introduce the study of Psychology to college bound students. It is hoped that they will become familiar with the terminology and will be able to apply this to the study of the basic elements of psychology. Areas of concentration will include biological foundations of the brain, perception, states of consciousness, thinking and language, motivation, learning, memory, classical and operant conditioning, personality theory, abnormal psychology, therapeutic techniques and social behavior.

## **Abnormal & Social Psychology**

Grade 12

Level 1 410201

The purpose of this psychology course is to provide the students with the opportunity to gain in-depth knowledge of abnormal and social psychology. The first two terms will focus on diagnosis and treatment of mental disorders such as depression, anxiety, schizophrenia, somatoform disorders, personality disorders, and eating disorders. The remaining terms will focus on Social Psychology theory and applications. Areas of focus will include the application of Social Psychology to the study of gangs, terrorism, crime, bullying and other relevant social topics.

#### **Economics**

**Grades 11, 12** 

Levels 1, 2

310301, 320301

This course is an introductory survey of the basic principles of microeconomics and macroeconomics. Students will examine key economic concepts through activities, projects, participation in the stock market game and problem-based learning. Among the topics analyzed are the study of markets, externalities, government intervention, taxation, national income, economic role of government, trade, banking, and money.

#### **International Relations: The World Since 1945**

**Grades 11, 12** 

Levels 1, 2

310601, 320601

This course is designed to focus on US foreign policy and the critical international issues facing our world today. Emphasis will be placed on such topics as the US response to terrorism and terrorist groups such as AL Qaeda, nuclear proliferation, globalization, and our relations with vital countries such as Iran and China. In addition, students will gain knowledge of the United Nations and its role, as well as the plight of developing nations socially, politically, and economically. This course will require active participation through debate and discussion.

## **Contemporary Issues**

**Grades 11, 12** 

Levels 2, 3

320501, 330501

This course emphasizes the issues and problems faced by today's world population. Through the use of magazine and newspaper articles, news and talk shows, as well as movies, the students will analyze and discuss the issues, in order to formulate solutions to these problems. Emphasis is placed on viewing, reading, writing and class discussion. Student assessment will include teachergenerated questions, oral reports, written research projects and class participation. The goal of the class is to provide students with an understanding of the issues that surround them in today's world.

#### Law

#### **Grades 11, 12**

Level 1

310401

The course will introduce students to the basics of the American legal system. The course will emphasize Constitutional Law and the rights that it provided American citizens. Students will explore the areas of freedom of speech, freedom of religion, rights of the accused, rights to privacy, and civil rights. Additional emphasis will be placed on criminal law and the course will examine the arguments and strategies involved in both prosecuting and defending criminal cases. The course will also explore the basics of family law, civil law, and business law. Students will develop logical and critical thinking skills in their analysis of the important legal cases that impact our nation. Students will also sharpen their communication skills by participating in debates and mock trials.

Levels 2, 3 320401, 330401

The course in law is intended to develop an appreciation of the Anglo-American common law experience by sharpening critical and analytical skills. Set upon an historical background, the reasons for law and the types of legal systems which have been used, are examined. Substantially the course is basically one of Constitutional Law, examining the major areas of freedom of belief, freedom of expression, equal protection, and the rights of the accused. Some work is done in the areas of the civil (defamation) and criminal (homicide) law.

## **European History AP**

Grade 12

Level 9 490201

This course examines the history of Europe from the 15<sup>th</sup> century to the present. Emphasis will be placed on political, diplomatic, social, economic, intellectual and cultural developments. Students will analyze a wide variety of challenging primary and secondary sources to evaluate historical evidence and offer insight on different historical interpretations of Western Civilization. This course will correspond to recent trends in history curricula at the undergraduate level and will prepare students for the College Board examination in European History. **All students are required to take the AP exam.** 

## **Social Studies Department Part-time Courses**

# World Geography Grades 9-12

## 3 periods per cycle

605401

This course is a broad overview of the major regions of the world and a study of people, places and environment from a physical and cultural perspective. Through a variety of classroom activities and projects, students will gain an appreciation and understanding of the interdependent work in which they live. Students will analyze and evaluate the connection between their local and global communities die to world trade, travel, natural environment, communication and culture.

## Post WWII: The American Experience Since 1945

**Grades 11-12** 

### 3 periods per cycle

603401

This course will take an in-depth look into American affairs in the post World War II era. Some of the topics covered are: the Korean War, Cold War conflicts and policies, the Civil Rights movement, the Vietnam War, Watergate, and the War in Iraq. This course will look into popular culture issues such as music, art, everyday life and new technology of the time. The goal of this course is to give the students a better understanding of American life and government today.

## **MATHEMATICS**

## **Mathematics Dept. Calculator Policy:**

To follow the Massachusetts Curriculum Frameworks and to meet our school's academic expectations, it is necessary to utilize technology as an essential tool in the teaching of mathematics. In keeping with the school's Mission Statement, that each student come to school ready to learn, and to maximize learning success, appropriate calculators will be recommended for use at home and in school.

It is recommended that all students provide their own calculators and develop proficiency with them. Scientific calculators are sufficient for Geometry courses. Graphing calculators are encouraged for all courses starting with Algebra II, while strongly recommended for Pre-Calculus and Calculus. The TI-84+ graphing calculator is recommended. Teachers will inform students of the appropriate calculator at the beginning of the school year.

In addition, students taking the math portion of the state testing program (MCAS), the SAT's and the PSAT's will be required to have their own calculators and be proficient with them. A minimum scientific calculator is required. A graphing calculator is required for taking the Calculus AP exam.

#### **COURSE OFFERINGS:**

## Pre-Algebra Grade 9, 10

Level 3

130103

This is first of a four-year sequence of mathematics courses that cover elementary and intermediate algebra, which fulfill the admission requirements of some colleges. Topics in this course include basic skills, number theory, variables, equations, inequalities, real world applications, graphs, functions, probability, statistics, and polynomials. Students should show appropriate skill level to succeed in this course by taking a grade 8 placement test. Please note Grade 10 students taking this course must also take Math Applications.

## Algebra I Grade 9

Level 1

110103

This course is a more in-depth study of Algebra I, and at a quicker pace. The concepts of algebra are introduced with an examination of the structure and the techniques of algebra

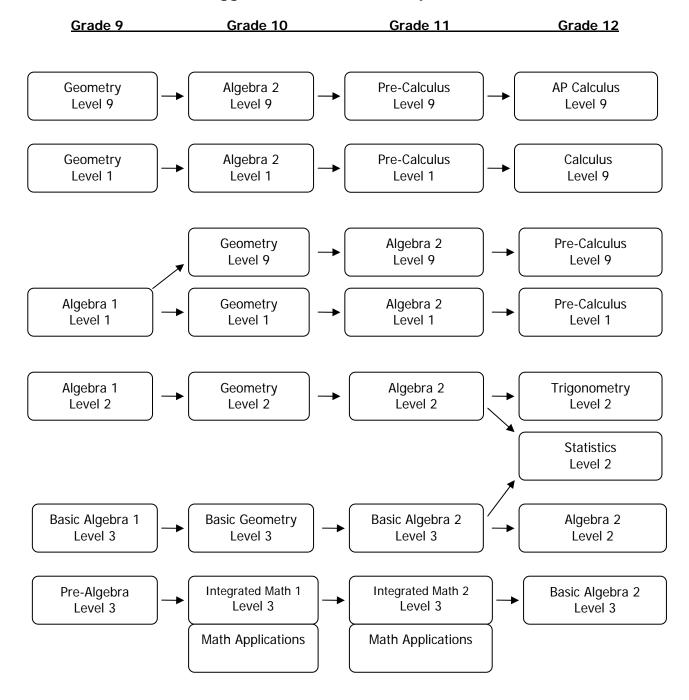
linear equations, factoring, quadratic equations, inequalities, graphing, probability, and statistics. Real world applications are integrated throughout the course. Students should have a minimum average of C+ in level 1 Math in grade 8 and/or qualify according to skill level on a grade 8 placement test.

## Algebra I Grade 9 Level 2

120103

The concepts of algebra are introduced with an examination of the structure and the techniques of algebra. Topics studied include: number lines, variables, functions, linear equations, factoring, quadratic equations, inequalities, graphing, probability, and statistics. Real world applications are integrated throughout the course. **Students should show appropriate skill level to succeed in this course by taking a grade 8 placement test**.

## **Suggested Math Course Sequence**



## Basic Algebra I

#### Grades 9

Level 3 230103

This course covers topics of elementary algebra including variables, polynomials, factoring, and rational expressions. Graphing, probability, and statistics are integrated throughout the course. Students should show appropriate skill level to succeed in this course by taking a grade 8 placement test.

## Geometry Grades 9, 10

Level 9 190103

Students taking this course will move at a quicker pace than level one. This course is a more in-depth study of Geometry including the definitions, postulates, and theorems of plane geometry using a rigorous theoretical approach with emphasis on logical

arguments and proofs. The course covers plane geometry, deductive reasoning, problem solving strategies, and logic. Solids and three-dimensional space is explored and developed including surface area and volume. There is a special emphasis on coordinate and transformational geometry. Right triangle trigonometry is introduced and explored. **Students should have a minimum average of B+ in Algebra 1, level 1, in grade 8 or 9, and gualify according to skill level on an Algebra final exam.** 

## Geometry Grades 9, 10

Level 1 210103

This course covers the definitions, postulates, and theorems of plane geometry using more rigorous approach. Plane geometry, deductive reasoning and logic, areas and volumes of plane and solid figures are also covered. Solids and three-dimensional space is explored and developed including surface area and volume. There is a special emphasis on coordinate and transformational geometry. Right triangle trigonometry is introduced and explored. Students should have successfully completed Algebra I level 1 with a final average of C+ in grade 8 or 9 and/or achieved a qualifying score on an Algebra I final exam.

#### Grade 10

Level 2 220103

This course emphasizes a more investigative approach to geometry. Students study plane geometry, deductive reasoning and logic. Solids and three-dimensional space are explored, including surface area and volume. There is a special emphasis on coordinate and transformational geometry. Right triangle trigonometry is also introduced. **Students should have successfully completed Algebra 1 level 2 with a minimum final average of C-**

## **Basic Geometry**

Grade 10

Level 3 330103

This is a contemporary course in geometry. Less emphasis will be placed on deductive proofs and more stress will be placed on the theorems of geometry. This is the third course in a 4-year sequence of college preparatory mathematics. Successful completion of this course meets admission requirements for some colleges. **Students should have successfully completed Algebra I**.

## Algebra II Grades 10, 11

Level 9 290103

This course covers all the topics of Advanced Algebra II at a more rapid pace and in more depth. The concepts of algebra are expanded to include real and complex numbers, graphing, conic sections, all aspects of quadratic equations, varied applications of word problems, systems of equations, matrices and logarithms. Students are strongly encouraged to have their own graphic calculator. The TI-83 is recommended and will be used in class. **Students should have successfully completed level 9 Geometry or level 1 Geometry with an average of B+ or higher.** 

## Algebra II Grades 10, 11

Level 1 310103

The concepts of algebra are expanded to include real and complex numbers, various functions, graphing, conic sections, all aspects of quadratic equations, varied applications of word problems, systems of equations, matrices and logarithms. Students are strongly encouraged to have their own graphic calculator. The TI-83 is recommended and will be used in class. This course covers all the topics of Algebra II, level 2, in greater depth and rigor. Additional topics include matrices, and determinants. **Students should have successfully completed Geometry and Algebra level 1 with an average of C- or better.** 

Level 2 320103

This course in intermediate Algebra continues the study of the structure of algebra, reinforcing the topics of Algebra I. The concepts of algebra are expanded to include real and complex numbers, various functions, graphing, conic sections, all aspects of quadratic equations, varied applications of word problems, systems of equations, and matrices. **Students should have successfully completed Geometry and Algebra I**.

## Basic Algebra II

Grade 12

Level 3 430103

This is the fourth and final course in the Level 3 sequence. The essential topics of an intermediate algebra course including, real numbers, various functions, graphing, quadratic equations, varied applications of word problems, systems of equations, will be covered. Admission for some colleges is met if credit is received for this course. **Students should have successfully completed Basic Geometry (3) or Geometry (2) or Integrated Math II.** 

# Integrated Math I Grades 10, 11

Level 3 230203

This is a course in which students learn mathematics in the context of real world applications and a wide variety of problems. The course is intended for students who have difficulty with the abstract nature of the traditional approach. Topics in Algebra,

Geometry, Logical Reasoning, Measurement, Probability, Data Analysis, Statistics, Patterns, Relations, Number Sense and Operations are interwoven throughout. These topics are spiraled throughout the course to enhance learning. It is expected that this course is part of a two-year sequence. **Students should have successfully completed Pre-Algebra**.

## **Integrated Math II**

**Grades 11, 12** 

Level 3 230303

This is a course which builds on the mathematics learned in Integrated Math I. Topics covered will be from the same areas of mathematics but will build on knowledge from the previous year. **Students should have successfully completed Integrated Math I**.

## Trigonometry/Advanced Algebra

Grade 12

Level 2 420103

This course is designed for students who are interested in continuing their study of mathematics. All topics of trigonometry will be covered as well as a review and extension of algebra topics. Students expecting to take more mathematics courses in the future or planning to study electronics and other technical fields would be well advised to elect this course. **Students should have successfully completed Algebra 11.** 

## **Statistics**

Grade 12

Level 2 420203

This course specifically addresses the tenth and twelfth grade Massachusetts Mathematics Curriculum Frameworks in Data Analysis, Statistics, and Probability. In addition, the course will also cover some standards in Patterns, Relations and Algebra, as well as Number Sense and operations. Students enrolled in this course are assumed to have mastered the concepts outlined in the Algebra 2 standards of the curriculum frameworks. The purpose of this course is to present basic concepts and techniques for collecting and analyzing data, drawing conclusions, and making predictions. This course will assist in the preparation for college and potential mathematics entrance/placement exams. There will be many projects and case studies to enhance student learning. A scientific calculator is recommended for this course. **Students should have successfully completed Algebra 11 or Basic Algebra 11.** 

# Pre-Calculus Grade 11

Level 9 390103

This course will cover all topics found in Pre-Calculus with more depth and an accelerated pace. Students will also study additional topics relating to the study of calculus. This course includes a thorough study of functions, trigonometry, and other advanced topics. This course begins a study of mathematics that thoroughly combines algebra and geometry. Since functions are the foundation of calculus, the course covers rational, exponential, trigonometric and logarithmic functions. Other topics addressed include: circular functions, identities, analytic geometry, complex numbers, matrices, determinants, polar coordinates, limits and series. Graphing calculators are necessary for this course. (Prerequisite: C or better in Algebra II or recommendation of math teacher.) Students taking this course should be planning to enroll in AP Calculus as seniors. Students should have successfully completed Algebra II (9) with a B average or higher or Algebra II (1) with an A average.

Grades 11, 12

Level 1 410103

This course includes a thorough study of functions, trigonometry, and other advanced topics. This course begins a study of mathematics that thoroughly combines algebra and geometry. Since functions are the foundation of calculus, the course covers rational, exponential, trigonometric and logarithmic functions. Other topics addressed include: circular functions, identities, analytic geometry, complex numbers, matrices, determinants, polar coordinates, limits and series. Graphing calculators are necessary for this course. Students should have successfully completed Algebra II Level I with a C average or higher.

## Calculus

Grade 12

Level 1 410203

This course is organized and presented specifically for the high school senior. It will begin with a review of number theory, linear & quadratic functions, trigonometric functions & conics. All standard topics of elementary calculus will be covered, including limits, continuity, techniques of differentiation and integration. Differential equations will be applied to the solution of practical problems regarding maxima, minima, rates of change, and motion. Integration will be applied to problems of area and volume. Graphing calculators are necessary for this course. **Students should have successfully completed Pre-Calculus.** 

#### Calculus AP

Grade 12

Level 9 490103

This course is designed to cover the syllabus for Advanced Placement Calculus (AB) as prescribed by the College Entrance Examination Board. Students are expected to take the AB exam in the spring when the course concludes. A TI-83 Plus calculator, or the equivalent is required for use in this course. Topics include functions, limits, derivatives and their applications, integrals and their applications, parametric equations, polar coordinates, and infinite series. The philosophy and goals of Advanced Placement

Calculus will set the direction for the entire course. The Rule of Four will be used to develop students' understanding of the concepts of calculus. The Rule of Four is shorthand for the multi representational approach to mathematics that encourages all the topics, results and discussion be done verbally, analytically, numerically and graphically. Some topics from the BC syllabus will be covered, but preparation for the (AB) AP Calculus exam will be given. **Students should have successfully completed Pre-Calculus. Recommendation of teacher required** 

## **Math Applications**

#### **Grades 10-12**

No Level 330203

This course emphasizes the Learning Standards of the five strands of the Massachusetts Mathematics Curriculum Framework: 1.) Number Sense and Operations, 2.) Patterns, Relations, and Algebra, 3.) Geometry, 4.) Measurement, and 5.) Data Analysis, Statistics, and Probability. The course is designed to prepare students for the mathematics portion of the MCAS test. Students are evaluated on the basis of their performance in previous math courses and prior MCAS scores for placement into this class. Requirement: This MCAS course must be taken in conjunction with another math course. IT CAN NOT BE TAKEN ALONE. This course does not count toward the mathematics graduation requirement.

## **SAT Math Prep**

#### **Grades 10-12**

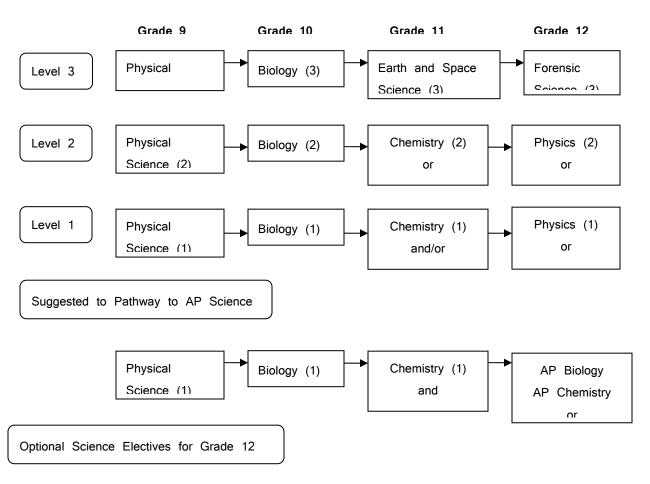
### Semester 2 periods per cycle

600203

A one semester course intended to help students improve scores on the math section of the PSAT/SAT tests. Available texts and/or software will be used in this course. Students can enroll in this course more than once.

#### SCIENCE

## Suggested Science Course Sequence



Level 2 Level 1

Environmental Science Environmental Science

Human Anatomy and Physiology Human Anatomy and Physiology

#### Science

The Science Department has adopted Academic Expectations 6 and 7.

- 6. Solve problems by reasoning critically and creatively.
- 7. Assimilate, analyze, interpret, and evaluate information critically to become capable researchers.

#### SCIENCE PROGRAM

The science program offers strong traditional core science courses such as Physics, Biology, and Chemistry. Offered electives include Environmental Science, Human Anatomy and Physiology, AP Chemistry, AP Biology, AP Physics, and Earth and Space Science. Colleges and universities traditionally consider Physics, Biology, and Chemistry as single-discipline lab courses serving as the foundation of the science program. **All full-time science courses are lab courses and meet 7 periods per cycle.** 

#### **COURSE OFFERINGS:**

### **Physical Science**

Grade 9

Level 1 110104

This accelerated course is a conceptual study of motion, forces, energy, momentum, heat and heat transfer, waves, electromagnetism, and electromagnetic radiation with a focus on the basic principles of physics. This course is devoted to imparting a sound foundation in the areas of measurement, laboratory techniques and the analysis of experimental data. **Students should have a minimum average of B in level 1 Math and Science in grades 7 & 8.** 

Level 2 120104

This course is a conceptual model that involves the study of motion, forces, energy, momentum, heat and heat transfer, waves, electromagnetism, and electromagnetic radiation along with the basic principles of chemistry. This program gives students experience in measurement and observation, basic laboratory skills, and analysis of experimental data.

Level 3 130104

This course is structured to provide coverage in the basic principles of physics and chemistry which include motion, forces, energy, momentum, heat and heat transfer, waves, electromagnetism, and electromagnetic radiation. Emphasis is placed on thinking and study skills and the basics of measurement and laboratory skills and techniques.

## Biology

## Grade 10

Level 1 210104

This accelerated lab course encompasses a comprehensive study of biological concepts with an emphasis on investigation and inquiry. Much consideration is given to the cellular and biochemical approach to the study of the processes of organisms. Major topics include biochemistry, cellular biology, anatomy and physiology, evolution, genetics and ecology. Enrichment is provided whenever possible. An intensive, self-paced summer assignment (which will count as one lab grade in term 1) and an experimental research project is mandatory in this course. **Students should have a minimum average of B+ in Physical Science.** 

Level 2 220104

This is a college prep lab course, which encompasses a comprehensive study of biological concepts with an emphasis on investigation and inquiry. Major topics include biochemistry, cellular biology, anatomy and physiology, evolution, genetics and ecology.

Level 3 230104

The basis of this lab course is the comprehensive study of fundamental biological concepts. Topics to be discussed include biochemistry, cellular biology, anatomy and physiology, evolution, genetics and ecology.

#### Chemistry

### Grade 11, 12

#### Level 1 310104

This lab course is an in-depth study of the principles of chemistry. The curriculum, which is aligned with the Massachusetts Curriculum Frameworks, includes such topics as atomic structure, chemical bonding, chemical and nuclear reactions, stoichiometry, acids and bases, gas laws, and thermo-chemistry. A variety of experiments are performed and the data analyzed to reveal scientific patterns that enhance the students learning experience. **Students should have a strong background in Algebra**.

Level 2 420204

This college preparatory lab course studies the principles of chemistry. The curriculum for this course, developed from the Massachusetts Curriculum Frameworks, includes but is not limited to the properties of matter, atomic structure, periodic trends and properties, chemical bonding, chemical and nuclear reactions, and stoichiometry. An integral part of the program, the various laboratory experiences enhance and support the chemical concepts being studied. **Students should have a fundamental understanding of Algebra**.

#### **Physics**

### **Grades 11, 12**

Level 1 410304

This lab program represents a challenging physics curriculum designed for the honors student. It serves as both an informative

physics course and as an excellent foundation for further work in mathematics, science, or engineering. Areas of emphasis include the study of kinematics, dynamics, electricity and, time allowing, magnetism, light and atomic structure. **Students should have successfully completed Algebra 11.** 

Level 2 320104

This is an algebra-based physics lab course designed for students preparing for college. It investigates the science of energy covering topics such as mechanics, thermodynamics, electricity, magnetism and optics. The development of skills and thought processes are stressed especially in the areas of experimentation and problem solving. Students should have successfully completed or be concurrently enrolled in Algebra II.

## **Earth and Space Science**

#### Grades 11

Level 3 330604

Earth and Space Science is a laboratory course which integrates an in-depth study of the Earth and specific characteristics of the solar system. The study of the Earth will include its history, composition, structure, oceans, atmosphere, and place in the universe. The characteristics of the solar system will include the motion and structure of the universe and space exploration. In addition, students will also learn about how environmental changes and resource use impacts our climate and sustainability. This is now a lab course and meets 7 periods per cycle.

#### **Forensic Science**

#### Grade 12

Level 3 331104

Forensic science is the application of science to criminal and civic law by the criminal justice system. Forensic science is utilized within the fields of criminalistics, engineering, jurisprudence, pathology, anthropology, psychiatry, behavioral science, and toxicology. This lab science course will survey key aspects of forensic science and will involve utilizing such concepts to solve various fabricated crimes. Case studies will be used to reinforce material covered and mock trials will serve to aid students in applying the learned forensic strategies such as collection, analysis, and presentation of findings to a legal setting. This is now a lab course and meets 7 periods per cycle.

## **Human Anatomy and Physiology**

#### Grade 12

Level 1 410404

This challenging course is designed for the honors student. The accelerated, comprehensive curriculum will familiarize students with the anatomy, physiology, and histology of the human organ systems. Students interested in a biology, pre-medical, or predental college program should consider taking this course. **Students should have a strong background in math and science.** 

Level 2 420404

The primary role of this college preparatory course is to familiarize students with the structure and function of the organ systems of the human body. It is designed for those interested in working in nursing, physical education and health-related professions. **Students should have successfully completed courses in both Biology and Chemistry.** 

## **Environmental Science**

#### Grade 12

## Levels 1, 2 410304, 420304

The primary role of this lab oriented course is to allow seniors the advantage of utilizing information they have previously attained in their physical science, biology, and math classes and apply that knowledge to this interdisciplinary science. The course focuses on the scientific method, environmental laws, environmental problems and ecology. Students will also concentrate on biodiversity, energy, waste, water, air, and soil testing. This class encourages and enhances the students' extended field science skills and knowledge. The theoretical aspect is taught in the classroom while the fieldwork applies the theory outside, as well as, in community service learning projects. **Students should have a strong background in math and science**.

#### ADVANCED PLACEMENT OFFERINGS

#### Grade 12, Level 9 (12 periods per cycle)

Advanced Placement courses are designed to offer rewarding academic experiences to highly motivated and mature students studying various science disciplines. Students enrolling in the advanced placement program must have a strong foundation in the core curriculum subjects of biology, chemistry, and physics. REQUIREMENT FOR ALL AP SCIENCES: a summer project needs to be completed by the first week of the program. All students enrolled in AP courses must take the appropriate Advanced Placement Examination and are responsible for the fee.

#### **ADVANCED PLACEMENT Biology**

#### Level 9 490104

The advanced placement biology course is a certified College Board course which follows the A.P. Biology curriculum established by the College Board. Students will be provided the opportunity to experience laboratory skills comparable to introductory college level Biology courses, including inquiry-based labs and computerized data acquisition and analysis. This class requires learning at an accelerated pace due to the amount and complexity of the required material. Material will be covered through daily class activities, lectures, discussions, laboratories, and independent projects. A student's success will depend on the time and effort that is invested

into this course. Students enrolling in the Advanced Placement Biology course should have a strong foundation in biology and chemistry. This course is designed to prepare students for the College Board A.P. Biology exam.

## **ADVANCED PLACEMENT Physics**

Level 9

The advanced placement physics course is a certified College Board course that represents the equivalence of a first-year college course. Students should have an excellent background in algebra, trigonometry, and should have a basic understanding of calculus, which should be taken concurrently. The major topics of study will include mechanics and electricity and magnetism. All labs are college level labs that reinforce the ideas presented in the lecture. A lab notebook is required for all laboratory entries. Upon completion of this course, all students will have an excellent background in physics. This course is designed to prepare students for the College Board A.P. Physics Mechanics C exam.

## **ADVANCED PLACEMENT Chemistry**

Level 9 490204

The advanced placement chemistry has been designed and certified to be equivalent to a first-year college chemistry course. Accordingly, the course is a progression of topics which are conceptually and sometimes mathematically challenging. A workable knowledge of algebra/trigonometry is strongly recommended. The laboratory investigations provide students with experience in chemical techniques and the use of instrumentation. All the required labs are college-level exercises that require intensive analysis and discussion. Each student who successfully completes this course will have an excellent foundation in chemistry. It is suggested that all students interested in taking AP Chemistry successfully complete a physics course in the prior school year. This course is designed to prepare students for the College Board A.P. Chemistry exam.

#### **Science Department Part-time Courses**

# Science MCAS Remediation Grades 9-12

3 periods per cycle

500104

490304

This mini course is offered based on student need in the fall and/or spring semester to students who need to pass the Massachusetts Comprehensive Assessment (MCAS) in science. It is designed to aid students to pass the exam and achieve the graduation requirement of attaining a passing score on the science MCAS.

**WORLD LANGUAGES** 

The World Languages Department has adopted Academic Expectations 1, 2 and 3.

- 1. Come to school prepared and ready to learn.
- 2. Develop and employ effective study skills.
- 3. Read, write, and communicate effectively.
  - Read widely and critically for a variety of purposes
  - · Write clearly, concisely, and persuasively
  - Communicate ideas and information effectively in an oral presentation

In order to satisfy most college's entrance requirements for foreign languages, a student should take at least two consecutive years of study (three and four years are preferable in the eyes of admissions counselors) in one of the following languages that offer a full sequence of courses: **French, Spanish or Portuguese.** We can only offer a two-year sequence in **Latin** if student requests are sufficient to warrant doing so. If there are any students who wish to further their study of Latin beyond Latin II, efforts will be made to accommodate the requests through **Independent Study**. There is no guarantee that a full four-year sequence will be offered in Latin.

## **COURSE OFFERINGS: Available to all grades**

**French Courses** 

#### French I

Levels 1, 2 110102, 120102

Much attention is given to pronunciation, the alphabet and sound system. Students are encouraged to communicate in the language at levels appropriate to their knowledge and ability. Basic skills in listening, reading, and writing are introduced. Ancillary materials are presented to foster an understanding of peoples and cultures. Critical thinking skills are emphasized.

#### French II

Levels 1, 2 210102, 220102

Greater attention is given to the spoken language, with continued emphasis on listening, translating, learning grammatical patterns and developing better reading comprehension skills. Paragraph writing is introduced and short oral presentations are assigned.

French III

Levels 1, 2 310102, 320102

Basic grammar presentations are completed. Communication skills continue to be emphasized in more demanding, situational settings. Students deal with more complex and lengthy writing assignments. Readings from outside sources are occasionally introduced.

#### French IV

### Levels 1, 2 410102, 420102

Detailed and sophisticated grammatical items are presented. Comprehension skills are emphasized in the context of current events as well as from the works of traditional authors. Communication skills are stressed through longer student presentations.

#### **Portuguese Courses**

## Portuguese I

#### Levels 1, 2 110302, 120302

Much attention is given to pronunciation, the alphabet and sound system. Students are encouraged to communicate in the language at levels appropriate to their knowledge and ability. Basic skills in listening, reading, and writing are introduced. Ancillary materials are presented to foster an understanding of peoples and cultures. Critical thinking skills are emphasized.

### Portuguese II

## Levels 1, 2 210302, 220302

Greater attention is given to the spoken language, with continued emphasis on listening, translating, learning grammatical patterns and developing better reading comprehension skills. Paragraph writing is introduced and short oral presentations are assigned.

## Portuguese III

### Levels 1, 2 310302, 320302

Basic grammar presentations are completed. Communication skills continue to be emphasized in more demanding, situational settings. Students deal with more complex and lengthy writing assignments. Readings from outside sources are occasionally introduced.

#### Portuguese IV

## Levels 1, 2 410302, 420302

Detailed and sophisticated grammatical items are presented. Comprehension skills are emphasized in the context of current events as well as from the works of traditional authors. Communication skills are stressed through longer student presentations.

## Portuguese V

## Level 1 510302

Creative use of the knowledge previously acquired by the student is stressed. More intricate grammatical constructions are introduced. Oral assignments and presentations are lengthened, as are writing assignments in the target language. Literary works by critically acclaimed authors are introduced to prepare the student for future college-level work.

#### **Spanish Courses**

## Spanish I

## Levels 1, 2 110402, 120402

Much attention is given to pronunciation, the alphabet and sound system. Students are encouraged to communicate in the language at levels appropriate to their knowledge and ability. Basic skills in listening, reading, and writing are introduced. Ancillary materials are presented to foster an understanding of peoples and cultures. Critical thinking skills are emphasized.

#### Spanish II

### Levels 1, 2 210402, 220402

Greater attention is given to the spoken language, with continued emphasis on listening, translating, learning grammatical patterns and developing better reading comprehension skills. Paragraph writing is introduced and short oral presentations are assigned.

## Spanish III

## Levels 1, 2 310402, 320402

Basic grammar presentations are completed. Communication skills continue to be emphasized in more demanding, situational settings. Students deal with more complex and lengthy writing assignments. Readings from outside sources are occasionally introduced.

## Spanish IV

## Levels 1, 2 410402, 420402

Detailed and sophisticated grammatical items are presented. Comprehension skills are emphasized in the context of current events as well as from the works of traditional authors. Communication skills are stressed through longer student presentations.

## Spanish V

Level 1 510402

Creative use of the knowledge previously acquired by the student is stressed. More intricate grammatical constructions are introduced. Oral assignments and presentations are lengthened, as are writing assignments in the target language. Literary works by critically acclaimed authors are introduced to prepare the student for future college-level work.

\_\_\_\_\_\_

## **BUSINESS TECHNOLOGY**

The Business Department has adopted Academic Expectations 4, 5 and 6.

- 4. Self-evaluate and reflect on their learning using a variety of methods.
- 5. Explore, develop, and express their creativity.
- 8. Demonstrate technological literacy as a tool for learning, research, and communication.

#### **CVTE - CAREER VOCATIONAL TECH ED.**

This is an elective program that offers students college credit while in high school in a selected career major. Our Business Department has articulation agreements for a number of courses with Bristol Community College. When a student has successfully completed the first semester at college, they may request to have the courses taken at the high school transferred to their official college records. In addition, as a junior or senior in the CVTE program, a student is allowed to take a limited number of continuing education courses at the college in their career path tuition free. Career paths are Business Administration, Office Administration, Computer Information, Computer Science Engineering and Environmental Studies. **Course Offerings** are identified by the abbreviation **CVTE**. Advanced Work Desktop Publishing, Principles of Business Management and Business Marketing are being reviewed for acceptance for the new school year.

Technology courses offered 6 periods per cycle fulfill the technology requirements for graduation.

#### **COURSE OFFERINGS:**

## Business Marketing Essentials (DECA, JA) (CVTE)

Grades 10 - 12

Levels 1,2 610705, 620705

This course will concentrate on the study of the definitive marketing functions of selling, promotion, distribution, risk management, pricing, purchasing, marketing information management & research, product & service planning and financing. In doing so, economic foundations, business and marketing foundations as well as human resource foundations will be applied and stressed throughout instruction. Integrated DECA competencies for competitive events are designed around the (NBEA) National Business Education Association frameworks and functions of marketing leading to college scholarships. Additionally, a Junior Achievement workshop will be offered in communications and interpersonal skills for inclusion as an activity on the student's transcript. The utilization of SCANS skills and curriculum frameworks are engaged.

#### Principles of Business Management (CVTE) (DECA, JA)

Grades 10 - 12

Levels 1, 2 610805, 620805

This course provides the student with a broad overall viewpoint of universal business operations as well as the art and science of management itself in regard to planning, organizing and controlling various activities and factors related to the private and public sectors. Areas of study will include the business environment, forms of ownership and the law, information and communication systems, production, marketing, financial, and human resources management as well as various aspects of managerial styles, leadership and decision making abilities. Students are given an opportunity to participate in the DECA competencies based on NBEA standards for competitive events leading to college scholarships. Additionally, a Junior Achievement workshop will be offered in communications and interpersonal skills for inclusion as an activity on the student's transcript. Use of applicable SCAN skills and curriculum frameworks are employed.

## Accounting and Financial Fundamentals (CVTE) Grades 10 - 12 Levels 1, 2 610405, 620405

This course is designed to introduce the student to the study of financial accounting by way of utilizing the multi-column journal approach. Accounting as it relates to the three forms of business ownership, namely; proprietorships, partnerships and corporations will be analyzed. Business start-up, journalizing transactions, posting to subsidiary and general ledgers, payroll accounting, taxes and reports, recording adjusting and closing entries, trial balances as well as financial statements such as Income Statements and Balance Sheets will be some of the topics covered. Additionally, personal income tax preparation will be analyzed through use of computerized software. SCAN skills and curriculum frameworks are stressed.

## **Business and Personal Finance (CVTE)**

Grades 10 - 12

Levels 2, 3 620205, 630205

This course of study is designed as a prequel to Accounting, Management and Marketing. Students are engaged in the study of personal financial planning, banking and credit, investing financial resources, protecting personal finances, an introduction to business finance as well as organizational financial planning. Students are engaged in cooperative learning through groups and in the development of financial planning guides. Online Internet activities will allow reinforcement of skills learned. Technology tools used include financial planning software, PowerPoint presentations and virtual business simulations. SCANS skills, NBEA standards, and curriculum frameworks are applied. This course does not fulfill MCAS EPP math requirements.

### **Business Communications Grades 10-12**

Levels 2, 3

The course content includes the following topics: choosing a career, preparing for an interview, mock interviews, communication skills necessary in the business world, writing letters of application, follow-up letters, oral presentations, composing professional resumes and related topics. Computer access to word processing allows students to complete necessary tasks to develop a career portfolio. Students also are exposed to current trends in business and global economies. The internet is used for career exploration and research. Scan skills and frameworks are an integral part of the program of applied learning.

620605, 630605

### Microsoft Office Professional (CVTE) **Grades 10-12**

Levels 1, 2 611105, 621105

The course of instruction is designed to develop the student's computer skills in word processing, spreadsheet applications, and database management and presentation graphics. Applied learning techniques and project-based activities lead to the development of an assessment portfolio. Application software used includes Microsoft Word, Excel, Access and PowerPoint. Students enrolled in the Tech Prep program are eligible to receive college credit in their career major. Internet access emphasizes career search options. The SCANS skills and curriculum frameworks are applied. \* Students that are college bound are strongly urged to enroll in this course due to the requests from higher institutions of learning that recommend background in MS OFFICE.

## Advanced Word Desktop Publishing (CVTE) **Grades 10-12**

Levels 1, 2 612105, 622105

This course of study is designed for those students who are proficient in word processing or have taken Microsoft Office Professional. Emphasis will be placed on creating word publication designs that have balance and incorporate graphic elements such as various font styles, sizes and colors, drop caps, watermarks, illustrations, photographs, charts, diagrams, tables, color combinations and page design layout. Types of documents created will be business, personal, promotional using PowerPoint presentation graphics, forms, designing a web page using a table, brochures, and promotional mail merge documents. As a requirement all students will create an assessment portfolio. The SCANS skills and curriculum frameworks are applied.

## **School Store**

**Grades 9 - 12** 602205

Offered full year, 1 to 4 times per cycle (dependent upon study hall schedules) the school store provides hands on training for those students who wish to learn about retail store management operations. Students are introduced to cashiering, product promotion and display, customer sales, inventory and other related situations such as daily cash counts, weekly cash proofs and bank deposits. Moreover, journal and ledger entries as well as financial statement preparation will be integrated with classroom instruction. No previous experience is needed. Students who intend to pursue careers in business and retailing or who are presently engaged in part-time employment and wish to enhance their skills in retail store operations are encouraged to enroll in this course. This school to career path will provide the student with retail store experience that can lead to gainful employment.

#### ENGINEERING TECHNOLOGY

The Engineering Technology Department has adopted Academic Expectations 6 and 8.

- 6. Solve problems by reasoning critically and creatively.
- 8. Demonstrate technological literacy as a tool for learning, research, and communication.

## **ENGINEERING TECHNOLOGY EDUCATION 9-12**

High technology touches everything in our lives today, and it is increasingly important that we have a basic understanding of its effects and controls if we are to be successful in the technocracy we live in. The objectives of the High School Engineering Technology Program are to present courses which reflect the four major areas of technology: communication, manufacturing, transportation and construction and to give students basic skills and concepts in these areas in a "learn by doing" approach. The program encompasses both theory and hands- on instruction with a heavy emphasis on the latter. The courses that have an asterisk following the title are Tech Prep or Advanced Tech. Students successfully completing the requirements of these

courses with a grade of B or higher earn college credit which will be accepted at Bristol Community College, New England Institute of Technology or Johnson & Wales University. Students should speak to their counselor or the teacher about the course to determine which colleges recognize the course they are interested in.

The following descriptors are constructed with reference to the fact that technology courses are structured to provide students with the means of meeting the academic expectations. The mission statement, in part, states: "Our primary goal is to develop critical and creative thinkers who will become informed decision makers and problem solvers. We recognize that all students learn at different rates and have varied interests and different learning styles.

Therefore, we strive to involve all students in a wide range of learning experiences intended to meet their individual needs for success in an increasingly global and technological society. Our challenge is to provide for the varied needs of our students while maintaining high expectations for performance and educational achievement with state educational guidelines.

Students in all engineering technology classes will be grouped heterogeneously regardless of their year in high school or level of designation. All students will be expected to demonstrate imaginative, critical and reflective thinking. All students will be expected to demonstrate knowledge and usage of the principles of technology and to analyze and interpret technical literature and engineering drawings as well as works of historical and cultural significance. Each student will be expected to participate in oral class discussions and presentations, complete written assignments, maintain a portfolio of work, and keep anecdotal records of his or her work.

**Note:** All lab courses may assess fees for take-home products. All students enrolled in hands on courses in engineering technology will be required to pass a safety exam prior to being allowed to conduct any hands-on work in the labs.

#### **COURSE OFFERINGS:**

## **Engineering Design**

Grades 9 - 12

Levels 1, 2, 3

#### 610106, 620106, 630106

Students will examine the steps of the engineering design process and produce original proposals for a variety of design competitions. "Project Based Learning" will be the main instructional strategy throughout this engineering course. This learning model allows students to design, build, test, and evaluate quality products and systems that meet world needs. Required assignments in the areas of Agricultural, Medical, Transportation, Construction, Manufacturing, Energy and Power, Communication, and Bio-related technologies among others provided the 9-12 grade students with an understanding and appreciation of the designed world. Examination of a variety of engineering based occupations is part of this course. The safe use of materials, power tools and machines highlight the student's engineering experience. Development of "Engineering Design" curriculum used the national Standards for Technological Literacy (STL) as published by the International Technology Education and Engineering Association (ITEEA). Our highly qualified teachers are active members in the ITEEA. Note\* Students selecting Level 1 will complete a required engineering design project and participate in the Somerset-Berkley Regional High School's annual science fair.

### Robotic Engineering Grades 9-12

Grades 9-12

Level 1, 2, 3

#### 610206, 620206, 630206

Robotics Engineering provides students opportunity to learn engineering concepts through experience and discovery. Students build, program and design real autonomous robots that can feel, touch and see. Students use hands-on engineering techniques to discover solutions to proposed design challenges and document outcomes in electronic portfolios. Robotics engineering engages students in learning that is both specific in it technological relevance and general in the way that the skills it requires, patience, problem solving, collaboration, communication, carry over to all facets of life and learning. This course is fundamental for students pursuing careers in the field of engineering and design. Level differentiation occurs by varying the complexity of the design challenge in terms of process and product.

# Advanced Robotic Engineering Grades 9-12

Level 1, 2, 3

#### 612206, 622206, 632206

This course will provide students with an in-depth study of robotics and artificial intelligence. Students will learn to reason critically, analytically and creatively to develop problem-solving skills. Students will engage in sophisticated design challenges and competitions. Using data collection sensors and feedback controls students will research and conduct experiments to test conclusions. Working in small groups, students will utilize the Engineering Design Process to carry out requirements of design challenges. Students will demonstrate technological literacy as they use a variety of software to digitize artifacts that represent fulfillment of standards. The artifacts are the transferred into a digital portfolio as a partial fulfillment of course requirements.

## **Graphics Engineering I**

Grades 9-12

Levels 1, 2, 3

### 610306, 620306, 630306

This introductory course emphasizes exposure to a wide range of computer programs and research techniques for producing quality publications and presentations. Students will work with software programs such as: MS Word, MS Publisher, Adobe Photoshop and MS PowerPoint to design projects that cover business, advertising, and presentation applications. Students will be required to utilize the internet, library and their own personal creative resources as input material for products. Projects will also require students to use the Savin SDC 531 Laser Color Copier and HP Business Jet 1200 Ink Jet printer for scanning and reproducing computer-generated images and text. Bindery and other finish operations will be examined as part of the course objective of

establishing authenticity to the industrial environment. Projects will include advertisements, flyers, calendars, business cards, compact disc covers, slide shows and animated presentations. College-bound students and those considering a career in publishing, as well as, students that wish to improve their technology skills for related academic requirements, should consider this course as part of their studies. Electronic and hard-copy portfolios will accumulate to feature evidence of student work. Students will build and maintain a web-based digital portfolio to showcase their work and be the primary source of assessment.

## **Advanced Graphics Engineering**

**Grades 10-12** 

Levels 1, 2, 3 610706, 620706, 630706

This course is available to students that have successfully completed Graphics Engineering I. The course content reflects authentic 'world of work' activities that exist in the print and digital communications industries. This is a project based course that follows the convention of current 'design to market' manufacturing and communications. Students work in a collaborative setting to produce both printed and digital work. Students will learn to use advanced graphics and video software tools used in commercial video, digital and advertizing media including stop motion video production. Students will build and maintain a web-based digital portfolio which will be used to showcase their work and be a primary source of their assessment.

### Computer Diagnostics and Repair I

**Grades 9 - 12** 

Levels 1, 2, 3

611506, 621506, 631506

This course will provide students with hands on skills in the diagnosis and repair of personal computers. Students will tear down and rebuild PC systems and diagnose hardware and software problems, install software and solve software conflicts. Students will use diagnostic techniques and tools to evaluate problems, develop solutions, and the implement them in the most appropriate manner. As an integral part of this course, students will develop an understanding the PC history, where we are today, and where the future may lead and how it impacts their lives through hands on lab work, research projects and class presentations. Computers impact our lives on a daily basis and everyone should know and understand how computers work and what may go wrong, even if they do not want to make the repairs themselves. This course will provide introductory skills which will prepare students to pass A+ certification exam for computer repair technicians.

## Computer Drafting and Design I (CVTE)\*

**Grades 9 – 12** 

Levels 1, 2, 3

620506, 623506, 633506

Students enrolled in this course will learn the basics of Computer Aided Drafting. Students will complete assignments in the areas of single-view, orthographic projection, sectional, auxiliary, and isometric drawing. Additionally, each student will plan, design, and draw a complete set of plans for a house. Students will document progress and demonstrate proficiency via digital portfolios. This course is offered as both a fulltime elective (6 periods per cycle) and a part-time elective (3 periods per cycle). **Those students enrolled in the part-time class will need permission of the instructor to enroll in Computer Drafting II.** 

# Advanced Computer Drafting and Design (CVTE)\* Grades 10 – 12

Levels 1, 2, 3

### 610606, 620606, 630606

Students enrolled in this course will learn the basics of Computer Aided Drafting and Design through mastery of the Rhinoceros program. Using the System Design Model, students will learn to design objects in three dimensions, give the object a surface, and then apply materials, textures, and lighting to those surfaces to give them a lifelike appearance. The student will then render their design giving it realistic real world appearance. In addition, students will use the animation capabilities of the program to animate their creation and create short movie presentations of their designs using various programs. Students will document their progress and development by maintaining a digital portfolio on the internet. Upon completion of this course, the student will be proficient in designing three-dimensional objects and presenting them in the best possible way to prospective clients. As each student increase their skill level and becomes proficient the instructor will assign more complex assignments that the student will be required to be required to hand sketch their design, draw it in 3d, render the model, and then put together a detail portfolio of their project for a perspective client. Prerequisite: Computer Drafting & Design I and/or previous Advanced Computer Drafting & Design.

\* Note: All Tech Prep and Advanced Tech students must meet level 1 or level 2 requirements.\*

#### **Engineering Technology Department Part-time Courses**

# Intro to Computer Drafting and Design Grades 9-12

3 periods per cycle

623506

Students enrolled in this course will learn the basics of Computer Aided Drafting. Students will complete assignments in the areas of single-view, orthographic projection, sectional, auxiliary, and isometric drawing. Additionally, each student will plan, design, and draw a complete set of plans for a house. Students will document progress and demonstrate proficiency via digital portfolios.

Those students enrolled in the part-time class will need permission of the instructor to enroll in Computer Drafting II.

## Web Page Design Grades 9-12

## 3 periods per cycle

601806

Students will explore web page designs by creating pages to serve various marketing functions. After taking this course you will have the skills necessary to design a web site that is easy to use and fulfills the needs of the users. Students will work independently to develop various styles of web sites using programs such as MS FrontPage, MS Publisher, Adobe Dreamweaver, and web based programs. The goal is to create sites that are easy to use, exciting and fulfill the needs of end-users. As part of this course you will also learn to understand the importance of graphic design in web page layouts and the use of animations, video and sound in a web site. Students will be required to develop their own animation for a web site. The course will also encompass presenting and explaining your web site design to the class.

## FINE ARTS DEPARTMENT

The Fine Arts Department has adopted Academic Expectations 4, 5 and 6.

- 4. Self-evaluate and reflect on their learning using a variety of methods.
- 5. Explore, develop, and express their creativity.
- 6. Solve problems by reasoning critically and creatively

#### ART

# ART PROGRAM Grades 9-12

Levels 9, 1, 2, 3

Everyone possesses an aptitude for and is capable of developing a proficiency in one or more forms of art. Art is essential to the education of all students. Electing art affords the opportunity to develop and use an impressive assemblage of knowledge and skills. It provides extended learning opportunities. Many studies have documented the role of art in improving basic skills of learning areas in the curriculum. Students selecting one or more of the following courses will:

- · Acquire and apply essential skills
- Use the arts to express ideas, emotions & beliefs
- Use imaginative, reflective, analytical & critical thinking
- Understand the visual arts in relation to history and culture
- Use technology
- Make connections among the arts and other disciplines

Attitude, interest, commitment and desire will play an important part of each student's success.

**Please Note:** Because of space constraints in art classes, it is necessary to limit the number of classes each student may take in the Visual Arts Department. Students who are enrolled in more than 1 class must be students planning a career in the arts and/or students who have demonstrated dedication and craftsmanship in studio courses. **Special permission must be acquired from the art department in order to be enrolled in more than one art course.** 

### **COURSE OFFERINGS:**

## **Art Foundations**

## Grades 9, 10

#### 614108, 624108, 634108

Art Foundations is an introductory class for freshman and sophomores. This class will provide the student with a basic introduction to drawing and 2-dimensional and 3-dimensional design. Students will learn basic vocabulary, be exposed to various media, color theory, and drawing from observation. Art movements and artists from history will be integrated throughout the course. An emphasis will be placed on the elements and principles of design. Students will be expected to keep a sketchbook/journal for homework and reflective writing. Portfolios and self-assessments are also required.

#### **Ceramics**

#### **Grades 10-12**

#### 610108, 620108, 630108

Ceramics students will investigate the potential of clay as a means of discovering strengths, personal sensibilities and giving expression to a new range of experiences. This course provides foundation in a variety of processes including hand building, modeling, throwing and glazing. Some assignments will be supported by art historical introduction.

# Drawing & 2-Dimensional Design Grades 10-12

611208, 621208, 631208

Drawing I will teach basic techniques of drawing and painting with an emphasis on the elements and principles of design. Through the completion of a series of sequential projects, students will strengthen their ability to draw and paint expressively while using basic formal techniques. Students will achieve a greater understanding of the elements and principles of design through contour drawing, value studies, color theory, perspective, and printmaking.

## Jewelry, Metals, and Stained Glass

#### **Grades 10-12**

#### 612108, 622108, 632108

The first year in this course provides students with a foundation in the studio disciplines of jewelry/metals and stained glass. Students receive instruction through a series of hands-on, sequential assignments that focus on design fundamentals as well as basic fabrication skills and techniques. Students will achieve a greater understanding of craftsmanship while creating original works in each discipline. The course is divided into two units of study: terms one and two focus on the study of metalsmithing and jewelry making while terms three and four investigate the discipline of stained glass.

### **Sculpture**

### **Grades 10-12**

#### 613108, 623108, 633108

This course will teach basic sculptural concepts and procedures. Through hands-on projects as well as study of the methods and processes of historical and contemporary sculptors, students will create projects based on their own ideas, as well as concepts inspired by known artists. Through a series of additive, subtractive and replacement sculptures, students will build their understanding of the elements and principles of design as applied to a three-dimensional medium.

#### **Advanced Ceramics**

## **Grades 11, 12**

#### 610508, 620508, 630508

YEAR II OF STUDY: In this course students will develop more advanced technical skills with an emphasis on creativity and design. In addition, second year students will be given an introduction to glaze formulation and kiln firing. Students must have an average of B- or higher in Ceramics.

YEAR III OF STUDY: This course requires more advanced expressive and technical skill with focus on personal exploration supported by topical discussions of contemporary and historical ceramics. During this year of study, students are expected to create a body of work that is unified in direction, significant in degree of growth, innovative in its solutions and personal in expression. Students must have an average of B- or higher in Advanced Ceramics.

## **Advanced Drawing**

#### **Grades 11, 12**

#### 611508, 621508, 631508

**YEAR II OF STUDY:** Drawing & 2-Dimensional Design II will be a sequential extension of and build upon the basic techniques of drawing, painting and printmaking. Through the completed assigned problems, students improve in their ability to draw, paint and produce prints expressively or through observation using learned formal techniques. Students will also strive to achieve a greater understanding of the elements and principles of design through progressively more difficult and challenging applications of design, drawing, value and tonal studies, color theory, perspective and basic printmaking techniques. Critique and discussion of a variety of artists' work will be an integral part of the course. **Students must have an average of B- or higher in Drawing.** 

YEAR 111 OF STUDY: This course of studio study is the culmination of two prior years of sequential creative experiences in the areas of drawing and two-dimensional design. Students in advanced drawing will continue their artistic development and growth by becoming more intimately involved in the decisions governing the direction and goals of their artistic production. The course encourages students to involve themselves in both long and short-term studio problems and experiences, as well as in depth research of artists, cultures and stylistic movements of both historic and contemporary significance. The scope, sequence and specific nature of their concentration and artistic production will be determined jointly by the instructor and student. The specific goals and objectives for the course will be directly dependent upon the unique artistic, personal and educational intentions and needs of each student enrolled in the program. Personal reflection, self-examination and critique will regularly assess and evaluate student progress and achievement throughout the process. Students must have an average of B- or above in Advanced Drawing.

## Advanced Jewelry, Metals, and Stained Glass

#### Grades 11, 12

#### 612508, 622508, 632508

**YEAR 11 OF STUDY:** The second year in this course continues to engage students in the study of jewelry metals and/or stained glass. The intent of this course is to assist students in building upon the basic skills and techniques learned during the first year of study. This goal is accomplished through the completion of sequential assignments which explore more sophisticated applications and techniques. Students may choose to create works in either metal or stained glass for the duration of the four terms or divide the year into two units of study. In the second year of study, students take a more active role in determining the direction of their work in terms of material, design, and functionality. **Students must have an average of B- or above in Jewelry, Metals, and Stained Glass.** 

YEAR 111 OF STUDY: The third year of study requires a thorough understanding of the skills and techniques investigated during the prior two years of study. In the third year, students are expected to work more independently in developing and executing works which demonstrate a rich understanding of concept, design, and craftsmanship. Students will continue to develop advanced technical skills while creating a cohesive body of work in either metal or stained glass. An emphasis will be placed on research of significant historical and contemporary artists and trends as well as issues facing the working artist. Students must have an average of B- or above in Advanced Jewelry, Metals, and Stained Glass.

# Advanced Sculpture Grades 11, 12

613508, 623508, 633508

YEAR II OF STUDY: This course will build upon sculptural concepts and procedures learned in Sculpture I. Materials used and concepts explored in assignments will increase in the level of sophistication and complexity. Through hands-on projects as well as study of the methods and processes of historical and contemporary sculptors, students will again create projects based on their own ideas, as well as concepts inspired by known artists. Through a series of additive, subtractive and replacement sculptures, students will refine their understanding of the elements and principles of design as applied to a three-dimensional medium. Students must have an average of B- or above in Sculpture I

**YEAR III OF STUDY:** In the third year, of Advanced Sculpture, students will be expected to work more independently on a body of work of the student's choice. Using references of historical and contemporary sculptors, students will select subject matter and materials to explore in depth, culminating in a series of works both technically advanced and personally expressive.

Students must have an average of B- or above in Advanced Sculpture.

## Art History Grades 10, 11, 12

610608, 620608, 630608

The purpose and goal of Art History is to provide another avenue or medium to study the people rather than the events that compose history. Viewing, interpreting and understanding an individual work of art allows us the opportunity to understand the larger context which produced it. Art History allows for the study of varied races and cultures of people, both ancient and modern. Through understanding the motivations and concerns of others, we come to a fuller understanding of ourselves. A work of art is a physical link to the past and the hand that made it an artifact. Art History allows the opportunity for aspiring artists to view and understand the far-reaching history of human creativity. It serves as inspiration and a guide for young artists by introducing works and theories that must be interpreted and then either accepted or rejected. The History of Art establishes a vocabulary and context into which contemporary work can be placed and compared. Somerset-Berkley Regional High School's **Art History** course is a traditional survey course which introduces students to art and cultures spanning from prehistory to the modern world.

## **Art Department Part-time Electives**

# Digital Photography Grades 11, 12

(Gr. 10 with permission from instructor)

605105

In this course, students will learn the functions of a digital camera, and explore concepts for composing and creating photographs in art and design. Students will photograph a range of subject matter and ideas, as well as work in the lighting studio to conduct both fashion and product photo shoots. The course will culminate in the creation of an individual photo essay of the student's choosing. This course will require significant photography work outside the classroom, the use of a digital camera. **Students must provide their own digital camera**.

# Advanced Digital Photography Grade 12

#### 2 periods per cycle

605205

In this course, students will build upon knowledge form Digital Photo I, while also learning to manipulate photos in Creative Suite Programs such as Photoshop and Illustrator. Students will learn advanced techniques with the digital camera as well as complete assignments comparable to tasks encountered in the professional art and design fields. Students must provide their own digital camera. Students should have an average of B- or better in Digital Photography.

## AP Art Studio Grade 12

### 3 periods per cycle

(must be taken in conjunction with an Advanced Studio Art course)

690207

The AP Studio Art program is designed for highly motivated advanced art students who are seriously interested in the practical experience of art. Students will work throughout the year on a portfolio that will be evaluated by the Advanced Placement College Board. This course will require a significant commitment both in and out of the classroom, and previous training in their area of concentration. The student will concentrate on 2-Dimensional Design, Drawing, or 3-Dimensional Design. Students who elect the AP Studio Art will sign up for an advanced course in their chosen area (Sculpture, Ceramics, Drawing/Design), as well as the AP Studio Art class. Interested students will go through an evaluative process on a letter of intent, portfolio review and teacher recommendation. Students accepted into this program will be expected to do independent work over the summer and maintain a sketch book/journal. Students who do not complete the required summer work or attend meetings will not be a part of the AP Studio Art class in the fall. For additional information, students should contact Mrs. Troutman. **Students should have a B+ or better in their area of concentration.** 

#### **MUSIC**

The Music Department has adopted Academic Expectations 4, 5 and 6.

4. Self-evaluate and reflect on their learning using a variety of methods.

- 5. Explore, develop, and express their creativity.
- 6. Solve problems by reasoning critically and creatively.

## **Special Classes**

Interested students may check with the music department.

Private and class lessons on various instruments are given to many students by the music teachers and also by more advanced students.

Small ensembles (i.e. string quartets, brass quintets, etc.) may be offered, depending on the availability of the teacher and students.

### **Performing Organizations**

The following performing organizations exist at Somerset-Berkley Regional High School. Rehearsals and performances for these groups are both in and out of school. **Students will receive course credit for every rehearsal period that the class is scheduled for.** These organizations include performances at some or all of the following: Musictown Festival concerts, Vespers, the Spring concerts, and Music Festivals. Music of various styles is studied for the purpose of enriching the lives of these young people through cooperative individual participation.. All of these organizations encourage the intellectual, musical and social development of the individual through the performance of high-quality music. Students, who wish to participate in the Massachusetts' Music Educator Association (MMEA) Southeast District and Allstate festivals as well as the National Association for Music Education (MENC) festivals, must be a member in good standing of an appropriate school performing organization.

## **Concert Band**

#### Grades 9-12

### 3 periods per cycle

60907

This band is open to all wind and percussion students, grades 9 - 12, who have had at least 2 years of experience playing their instrument. This class is a pre-requisite for all extra-curricular band/color guard-related ensembles.

#### **Symphonic Wind Ensemble**

#### Grades 9-12

#### 3 periods per cycle

600807

This is a select band of students in grades 9 – 12, who have had a at least 2 years of experience playing their instrument. All members must audition for this group in the spring with the Director of Bands. **Students who participate in this ensemble must also participate in the Concert Band.** 

#### Orchestra

#### Grades 9-12

#### 3 periods per cycle

600707

This ensemble is open to all string players in grades 9 – 12, who have had a at least 2 years of experience playing their instrument. Wind and percussion players from the Symphonic Winds will be selected to perform with the strings to form a Symphonic Orchestra for select concerts. This class is a pre-requisite for all extra-curricular band/color guard-related ensembles.

#### **String Ensemble**

### **Grade 9-12**

#### 2 periods per cycle

600407

This is a select ensemble of string students, grades 9 – 12, who have had a at least 2 years of experience playing their instrument. All members must audition for this group in the spring with the Orchestra Director. **All students who participate in this group must also participate in the Orchestra**.

#### **Concert Choir**

#### Grades 9-12

#### 4 periods per cycle

600507

This ensemble is open to all ladies in grades 10 – 12, and men in grades 9 – 12. Ladies in grade 9 are open to join provided they are also enrolled in Treble Choir. 9<sup>th</sup> grade ladies must also participate in treble choir. This class is a pre-requisite for all extra-curricular band/color guard-related ensembles & choral ensembles.

## **Treble Choir**

#### Grades 9-12

### 2 periods per cycle

600607

Membership in this ensemble is elective and is open to all ladies in grades 9 – 12. Ladies in grade 9 are especially encouraged to join. This class is a pre-requisite for all extra-curricular band/color guard-related ensembles.

## Extracurricular ensembles:

These ensembles meet after-school or in the evening. All students who wish to participate in these ensembles must be a member in good standing of an appropriate <u>in-school ensemble</u>.

1. Blue Raider Marching Band (Fall Season/ June—December as well as Memorial Day Parade in May.) This organization is an extracurricular band comprised on horn line (woodwind & brass), color guard, battery percussion and pit percussion. All band students are encouraged to participate. The Marching Band competes at New England Scholastic Band Association (NESBA) marching band competitions, as well as performs at home varsity football games and in local parades during the fall season. All instrumental members of the Marching Band must be a member in good standing of the Symphonic Wind Ensemble and/or Concert Band; Color Guard members must be a member in good standing of any in-school band, choral or string ensemble.

- 2. Jazz Band (Full School Year Season/September-June) Membership in this organization is selective, and open to all students from grades 9-12 through auditions given in the spring based on openings in the ensemble. The ensemble rehearses weekly and represents Somerset-Berkley High School at various festivals, competitions, and performance sites during the school day and after school hours throughout the year. All instrumental members of the Jazz Band must be a member in good standing of the Symphonic Wind Ensemble and/or Concert Band; vocal members must be a member in good standing of any choral ensemble.
- 3. Winter Percussion Ensemble (Winter Season/December-April) The Indoor Winter Percussion rehearses weekly form December through April during after school hours and on weekends. The Winter Percussion Ensemble represents Somerset-Berkley Regional High School at New England Scholastic Band Association (NESBA) indoor percussion competitions beginning in February and ending in mid-April; All competitions are held on Saturdays and Sundays. Woodwind and Brass instrumentalists from other band ensembles are strongly encouraged to participate and learn a new instrument. All members of the Winter Percussion Ensemble must be a member in good standing of any in-school band, choral or string ensemble.
- 4. Winter Color Guard (Winter Season/December-April) The Winter Color Guard rehearses weekly form December through April during after school hours and on weekends. The Winter Color Guard represents Somerset-Berkley Regional High School at New England Scholastic Band Association (NESBA) indoor percussion competitions beginning in February and ending in mid-April;. All competitions are held on Saturdays and Sundays. Woodwind and Brass instrumentalists from other band ensembles are strongly encouraged to participate. All members of the Winter Color Guard must be a member in good standing of any in-school band, choral or string ensemble.
- 5. Chorale (Full School Year Season/September-June) Chorale rehearses weekly throughout the school year during after-school hours and represents Somerset-Berkley Regional High School at various festivals and performance sites during the year. Membership in the ensemble is selective, and open to all students from grades 9-12 through auditions given in the spring. This organization provides activities, experiences and performance opportunities similar to those included in other choral activities on a more advanced level. All members of Chorale must in good standing in Concert Choir and/or Treble Choir.
- 6. Show Choir (Full School Year/September—June) "Electrify" Show Choir rehearse weekly throughout the school year during after-school hours, evening hours and on weekends. Membership in the ensemble is selective, and open to all students from grades 9-12 through auditions given in the spring. This ensemble provides both singing and dance opportunities in a variety of contemporary genres. The "Electrify" Show Choir represents Somerset-Berkley Regional High School at various festivals and competitions beginning in November and ending in mid-April. All competitions are held on Saturdays and Sundays. All members of the "Electrify" Show Choir must be in good standing in Concert Choir and/or Treble Choir.

#### **COURSE OFFERINGS:**

# Music of the Theatre Grades 9–12

Levels 1, 2, 3

610207, 620207, 630207

This class meets six times per cycle and is an elective where the primary objective is to expose students to the rich history, heritage and evolution of the American Musical Comedy leading to a vast knowledge of New York's theatrical history from Vaudeville through modern day integrated musicals through the use of audio and visual media. Students will also develop an understanding of the production aspects of the theater world from the points of view of directors, producers and behind-the-scenes technicians. Students will also be required as part of this course to contribute to the Spring Musical Production whether it be during class time or as an extra-curricular participant. No instrumental or choral experience required.

## Vocal Techniques Grades 9–12

Levels 1, 2, 3

611307, 621307, 631307

This class is designed to provide students with the fundamental techniques of singing well in both solo and ensemble. Music of all styles, periods and cultures will be studied. Students will expand their individual abilities with both solo and class ensemble performances. Students will also develop skills necessary to become an independent musician. The class will be multi-leveled to meet student needs.

## Music Foundations 2 Grades 10-12

Level 1 611007

Music Foundations 2 is a highly demanding elective open only to serious music students in grades 10-12 interested in pursuing a career in music and that have successfully completed Music Foundations 1 or has been approved for this course by a member of the high school music staff. This class will continue advanced studies of music theory, improvisation, arranging, composition, and ear training as well as music history. Students will also research college music programs, prepare portfolios to include with college applications, and prepare for college-level music auditions. Successful completion of this course will result in better-developed performance skills, will provide a student skills needed to compose their own music and help the career driven student musician gain acceptance to a highly regarded undergraduate music program. Multi-year enrollment is open to the discretion of the instructor. Students should have successfully completed Music Foundations I or receive the recommendation of the teacher based on a music theory skills assessment.

### **Music Department Part-time Courses**

# History of Rock 'n' Roll Grades 9-12

## 3 periods per cycle

600107

The primary objective of this course is to expose students to American popular music in a variety of genres from 1950's pioneering rock 'n' roll to the contemporary genres of today's popular music, leading to an informed understanding of music as an art form. The primary function is to further the development of basic skills (such as structure/song form), broaden musical awareness and to understand how society influences the changing tide of musical styles. This course will explore the role that music plays in our everyday lives and students will be exposed to various media. No instrumental or choral experience required.

# Piano/Keyboard Lab Grades 9-12

## 3 periods per cycle

601107

The purpose of this class is to introduce and develop keyboard skills from beginner to intermediate. The class is recommended for Music Foundations and Jazz students as well as any other interested students. Each student may progress at their own speed, working individually and in groups. Included in this class will be the use of current electronic keyboards and electronic equipment, including sequencers, sound modules, and the Macintosh computer with music software. This class requires no previous experience. Multi-year enrollment is open to the discretion of the instructor

## Acoustic Guitar Lab I Grades 9-12

## 3 periods per cycle

601407

The purpose of this class is to introduce and develop basic skills for the beginner guitar students. **This class is NOT for experienced guitar players.** The class will focus on music of various styles, chords, scales, riffs and patterns. Students will develop musical reading and study skills necessary for mastery of the instrument. Students will be required to play both solo and ensemble literature. Acoustic guitars are available for student use; however students are encouraged to bring their own acoustic guitar to use in class.

## Acoustic Guitar Lab II Grades 10-12

#### 3 periods per cycle

601507

This class is open to students who have completed Acoustic Guitar Lab I with a grade of B or better, or by audition. This class will further develop the student as a classical guitarist. Students will expand their reading abilities and technique. Ensemble playing will be a large focus of this class. Students must be proficient in reading basic notation to enter this class. Acoustic guitars are available for student use; however students are encouraged to bring their own acoustic guitar to use in class. Multi-year enrollment is open to the discretion of the instructor.

# Music Production and Engineering Grades 9-12

#### 3 periods per cycle

600207

Music Production and Engineering meets three times a cycle and is designed for the student who is interested in music, but may not play an instrument. This class will spend much time exploring the newest forms of digital sound recording and manipulation on the computer through a process called sequencing. We will be investigating on-line resources and working with software programs such as Sonar 4, Audacity, Finale, and Band-in-a-Box to create music without performing on traditional instruments. Students will be creating their own songs from the computer as well as arranging well-known popular, jazz, classical, and folk songs from online midi resources and then recorded on CD's or digital media. In addition to digital audio recording, students will learn about sound production and put those skills to practical use by providing sound engineering and digital recording services for school events, concerts, and drama productions. Playing an instrument or the ability to read music is NOT necessary for this course but it is beneficial.

# Music Foundations 1 Grades 9-12

#### 3 periods per cycle

600307

This class is for serious music students interested in pursuing a career in music. This class will cover the basics of music theory, improvisation, arranging, composition, and ear training. This course is designed to enable students with experience in performing music, instrumentally or vocally, to take their musical skills to a higher level. With music theory, students will learn how the combination of melody, harmony, and rhythm develop into music. Ear training will allow them to become a better sight-reader and improviser. These two skills will allow students the ability to compose and arrange their own music. This course is designed as a prerequisite for Music Foundations 2.

## **WELLNESS**

The Wellness Department has adopted Academic Expectations 1, 5 and 6.

- 1. Come to school prepared and ready to learn.
- 5. Explore, develop, and express their creativity.
- 6. Solve problems by reasoning critically and creatively.

#### COURSE OFFERINGS:

#### **HEALTH AND CONSUMER SCIENCE COURSES**

## Food, Nutrition and Consumerism **Grades 10-12**

Levels 2, 3 220213, 230213

This course is designed for students who have a genuine interest in food cuisines, customs and its nutritional values. Students will be exposed to a wide range of foods through demonstrations, preparation and related activities, while continuing to develop an understanding of My Pyramid and its relationship to food selection. Areas of study include: basic nutrition, kitchen safety and sanitation, cooking terminology, preparation techniques, comparative food shopping and analysis of food market strategies, food culture and cuisine, impacts on global food supply, and organic and socially responsible products. Classroom activities will include not only the planning and preparation of food but participation in food related projects, such as menu planning, budgeting, and dietary/allergen restricted diets.

## Life and Relationships **Grades 11, 12**

Levels 2, 3

320210, 330210

This elective course is designed to help students gain a deeper understanding of the development of relationships and responsibilities one faces throughout a lifetime. The course begins with discussions on the nature of relationships and the natural progression to marriage and the decisions and implications of starting a family. Next is an in-depth study of the normal sequences of human development from conception to death. Issues covered include decision making, pregnancy, birth, child development, adolescence, aging, death and dying. Due to the sensitivity of some of the subject matter, a parental permission slip will be required.

## **Athletic Training and Exercise Science Grades 11, 12**

Level 1, 2

310209, 320209

This full year course discusses anatomy, the mechanisms of injuries common to athletic participation, how the body adapts to exercise, muscle structure and the influence of certain methods of training.

#### Health and Consumer Science Part-time Courses

## Health I Grade 9

## 2 periods per cycle (1 semester)

160110

Health I is a required course for all 9th grade students. The major objective is to prepare all students to become more informed and responsible members of the Somerset-Berkley Regional High School community. Areas discussed include: social and emotional health issues, suicide, teen depression, stress management, reproductive anatomy, physiology and current issues including the prevention of sexual violence and disease. Waivers for this course are available on request.

## Health II Grade 11

## 2 periods per cycle (1 semester)

360110

Health II is a required course for all 11th grade students. The major objective is to help prepare students to become informed, responsible adults regarding their health, behaviors, issues and choices. Topics include: social and emotional issues, body image, grief, sexuality issues especially those dealing with decision-making, violence and society. Waivers are available upon request.

**CPR/First Aid** Grades 11, 12

## 2 periods per cycle (1 semester)

301109

CPR/AED and first aid program is designed to give students confidence to respond in an emergency situation with skills that can save a life. The students will be able to recognize and care for injuries or sudden illness.

## Life Management Skills Grades 9, 10 3 periods per cycle

160113

This exploratory class will introduce students to basic skills related to personal and family care. Social and mental health issues as well as nutrition and fitness will be studied. Kitchen safety and sanitation issues are discussed along with the opportunity for students to practice cooking skills through the preparation of simple snacks and meals. Activities related to holiday cooking, crafts and decorations are included. Additional topics will include: consumerism, label reading, rights and responsibilities regarding purchases, organizational skills, interview and job skills, and etiquette.

\_\_\_\_\_\_

#### PHYSICAL EDUCATION

## **Physical Education**

## 2 periods per cycle

Physical Education is a required course for all Somerset-Berkley Regional High School students. Every student must pass 4 years of physical education. Physical education is an integral part of the school curriculum. The goal is to prepare students for a productive and healthy life through the presentation of units of study on fitness, wellness, activities, and lifetime sports. A complete change of clothing (proper gym attire) is required for all classes.

### P.E. Program of Study

Grade 9 160109

Freshmen will begin their physical education experience with a focus on fitness and weight training in term 1. They will then be given the opportunity to select from a competitive or non competitive activity for each unit.

Grade 10, 11, 12 260109, 360109

Upper classmen will be given the opportunity to select from a competitive or non competitive activity for each unit.

#### **MEDIA CENTER**

## **Virtual High School**

Various Codes

Somerset-Berkley Regional High School participates in the distance-learning program, Virtual High School. Virtual High School provides a wealth of quality online education options for high school students who would like a challenge in a computer setting.

Through VHS, schools expand their educational offerings and students expand their world view, as they attend class with students from across the country and around the world. Students gain access to a wide variety of courses not typically available and have the flexibility to take these courses anytime and anyplace as best fits their schedule. These courses are offered at various levels but are generally demanding and academically rigorous as they meet the same standards expected of students taking a traditional high school class.

Once enrolled, a student and his/her parent/guardian will sign a contract, which explains the responsibilities of taking a distance-learning course. For more information about the Virtual High School, students may visit the website www.govhs.org, speak with their counselor to see if they qualify, and/or meet with the on-site coordinator for VHS.

## **Hours of Operation**

The media center is open from 7 a.m. - 4 p.m. Monday through Thursday and Friday 7 a.m. - 2:30 p.m. for student research and study. The media center is home to an array of print and multimedia resources that complement the high school curriculum and are similar to those found in college and university settings. Students may borrow these materials with their Somerset-Berkley Regional High School library card.

In addition to the high school's collection, students are also able to take advantage of holdings from local public, college, and university libraries through inter-library loan. Students may expand on this by utilizing the Internet to view, download, and print

information from anywhere in the world. Students may connect to the Internet from and IBM PC computers located in the media center. These computers may also be used for word-processing, CD-ROMs, and card catalog searches.