# PROGRAM OF STUDIES 

2024-25


Resilient-Academic-Independent Digital-citizens-Empathetic-Respectful

## SOMERSET BERKLEY REGIONAL HIGH SCHOOL SOMERSET, MASSACHUSETTS <br> COURSE DESCRIPTIONS

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## VISION OF THE GRADUATE

The Somerset Berkley Regional High School Vision of the Graduate is a culmination of skills and attributes that each individual RAIDER will possess upon graduation

Somerset Berkley Regional School District Raiders are:<br>Resilient<br>Academic<br>Independent<br>Digital-Citizens<br>Empathetic<br>Respectful

## ACADEMIC EXPECTATIONS

In accordance with federal and state laws and regulations, students identified as eligible for special education have an Individualized Educational Program (IEP) that is designed by a team of individuals that includes district general and special education teachers, related service providers, other pertinent district professionals, the parents/guardians, and the student, when appropriate. Each IEP is developed to meet the unique needs of the student and includes information of what services will be provided, where the services will be provided, and the goals set for the student. All programs and services are provided at no expense to parents.

SBRHS provides a wide range of specialized instruction that represents a continuum of service delivery options. In keeping with the federal mandate of Least Restrictive Environment (LRE), teams will always consider providing specialized instruction in the general education classroom first with appropriate support in place. The vast majority of our special education students receive their specialized instruction within an inclusive environment, spending more than $80 \%$ of their day in the general education classroom. When the appropriate level of services requires instruction outside the general education classroom, the IEP team will consider other placement options, such as a pull out special education services, a specialized district program, or special education programs outside the Somerset Berkley in a state-approved special education school or collaborative.

The continuum of services provided to students who require individualized education programs (IEP) are provided in an array of settings:

## SPECIALIZED PROGRAMS

- Specialized Learning Center/LEAP: The LEAP program supports students with lower cognition and overall academic deficits of at least two years below grade level. This program is for students with more involved needs and/or multiple disabilities that require specialized instruction for most of their school day. This program includes academic, as well as life skill instruction. The curriculum is designed to address content-specific skills in the areas of mathematics, problems solving, calculation skills, vocabulary, functional life skills, written language, comprehension, and reading strategies.
- Therapeutic Learning Center Program: The Therapeutic Learning Center (TLC) provides students with high levels of anxiety, social-emotional, and self-regulation challenges. This is a program to support their development and skill set in behavior and regulation and to teach skills necessary to enable students to successfully access the general education classroom. Within the Therapeutic Learning Center, students are provided with support to access strategies for coping and de-escalation. Goals are developed for students with a focus on acquisition of strategies for coping with frustrations and anxiety, as well as goals for development of organizational skills to support success within the academic and social settings. Students within this class utilize a structured behavior system led by the BCBA. Students access grade-level instruction within the general education setting, supported by staff from the TLC program. The TLC classroom is led and supported by a special education teacher, Board Certified Behavior Analyst, School Adjustment Counselor, and paraprofessionals.
- Transitional Classroom (ages 18-22): The transition classroom is for students ages 18 to 22 who have graduated or completed their high school requirements and are continuing to work on individualized goals. The program focuses on functional life and occupational skills that prepare our students for their journey into adulthood. The program also offers access to post-secondary courses with educational support. Our students experience college both in the classroom and on campus. Activities integrated within the program include job shadowing and job training, introduction to financial planning, and personal goal setting for short-term and long-term goals. The students are supported by a classroom teacher and a job coach within this program.


## Specialized Support

- Instructional Strategies: The instructional strategies class is designed to address the student's need for direct, small group instruction providing learning strategies in the areas of comprehension, written language, problem-solving, organization, self-regulation, mathematics executive function skills and social skills taught by a special education teacher and paraprofessional. This class meets $2-5$ periods per cycle depending on the needs of each individual student. These classes are content-specific by student needs/IEP goals.
- Small Group Academics: In small group academics, a special education teacher leads instruction in this classroom in core academic areas of ELA, Math, Science and Social Studies. Students access general education grade level classes in each area according to individual needs and IEPs with paraprofessional support. Small Group Academic classes are grade-level courses that are smaller in size and allow for specialized instruction and a slower pace as needed to cover and master grade-level material.
- Inclusion model: In the inclusion model, special education personnel support students within the general education classroom setting in all areas of academics in collaboration with the regular education classroom teacher. Accommodations/modifications identified in each student's IEP are provided to further their accessibility to the regular education curriculum.


## LEVELS OF INSTRUCTION

Approximately halfway through the school year, teachers will recommend levels and courses for each student. Final decisions as to placement rest primarily with the parent/guardian and student, but families are encouraged to collaborate with their child's guidance counselor to finalize the level and/or course selection. Levels of instruction are designed as follows:

## Advanced Placement (AP)

Advanced Placement courses are college-level courses that provide a means by which secondary school students may demonstrate their readiness to undertake advanced courses as college freshmen. These courses are part of the College Entrance Examination Board's Advanced Placement Program, which encourages schools and colleges to provide challenging work for able students. Advanced Placement courses at SBRHS are offered in English, Fine Arts, Mathematics, Science, Social Studies and Technology. More information can also be found on the College Board.

Credit: All students enrolled in AP courses must take the AP test in order to earn AP credit and quality points. Students who do not take the test will earn credit and quality points as an Honors course.

## Honors (H)

Honors courses are designed to be of a high degree of rigor and move at an accelerated pace. Students who want to challenge themselves are encouraged to register for these classes. However, an Honors course differs significantly from an Advanced College Prep class in several ways. For example, the amount of preparation required for the class might include more extensive reading and writing assignments; assessments or tests may differ in their format
and difficulty level; higher-level critical thinking and reasoning skills are expected; science labs may require greater analysis of information.

## Advanced College Prep (ACP)

The Advanced College Prep program provides students with a rigorous curriculum that will prepare them for any two- or four-year college or university. It provides some opportunities for remediation that are built into the curriculum. The pacing is slightly slower than Honors.

## College Prep (CP)

College Preparatory classes are designed to challenge each student while providing additional support for students to be successful. These courses are aligned with the state frameworks where appropriate and prepare students for college and beyond. The 21st-century skills that are established will translate into being prepared for college classes, military service, or the workforce. The Class of 2027 and 2028 does not have this option available for coursework.

## INNOVATION PATHWAYS

Students will participate in Career Awareness and Exploration Seminars regarding IP during their freshman and sophomore years. Innovation Pathways (IP) are designed to give students coursework and experience in a specific high-demand industry such as Computer Science, Healthcare, and Biotechnology. Please speak to your guidance counselor if you are interested in pursuing one of these avenues.

## DUAL ENROLLMENT AND VIRTUAL HIGH SCHOOL

SBRHS offers several opportunities for students to take courses that are either not offered at SBRHS or that cannot fit into a student's schedule. Students can take courses at local colleges and universities through dual enrollment or through Virtual High School (VHS).

## Dual Enrollment

Students in dual enrollment courses are given the opportunity to earn college credit in a variety of courses at an affordable price. Students enrolled in dual enrollment courses must schedule their college classes after regular school hours or during the school day at times that would not cause them to miss class time in other courses.

Participation in dual enrollment courses requires pre-approval from both the Content Coordinator and high school administration prior to enrolling in the course. Once the course has been approved, the student and their parent/guardian will be asked to sign a dual enrollment contract, which explains the student's responsibilities. This contract can be obtained from the guidance department.

Dual enrollment courses must be 100 -level or 200 -level courses and must be three or more credits. Students must meet the dual enrollment requirements established by the local, participating colleges and must complete and submit all application requirements. Dual enrollment courses will not count toward a student's GPA or class rank. They will be included on high school transcripts.

Students enrolled in dual enrollment courses must have reliable transportation from Somerset Berkley to the college campus unless the dual enrollment courses are completed entirely online. Students are responsible for all expenses related to the course (tuition, fees, books, materials, etc.) unless the course is required to satisfy high school graduation requirements. At the conclusion, the student must submit an official college transcript to their guidance counselor for inclusion on the student's high school transcript.

## Virtual High School (VHS)

SBRHS participates in the distance-learning program, The VHS Collaborative. VHS 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 worldview, 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. Advanced Placement courses at SBRHS are offered in English, Fine Arts, Mathematics, Science, Social Studies, and Technology.

Once the course has been approved by the appropriate Content Coordinator, the student will be enrolled and be asked, along with their parent/guardian, to sign a contract that explains the responsibilities of taking a distance-learning course. Courses are a semester in length. A student may not withdraw once enrolled in a VHS class. These classes will be taken outside of school hours. For more information about the VHS Collaborative, students may visit the VHS Collaborative website, and speak with their counselor to see if they qualify.

## SBRHS Graduation Requirements

Students should carefully review the requirements before registering for courses.

|  | Core Requirements |
| :--- | :--- |
| English | 20 credits (English I, II, III and IV/Capstone) |
| Social Studies | 15 credits (U.S. History I \& II, Modern World History) |
| Mathematics | 15 credits |
| Science | 15 credits |
| Physical Education | 10 credits (must take one per year) |
| Health I \& II | 5 credits (Health I and Health II) |
| Civics/Financial Literacy | 2.5 credits (11th-grade class) |
| Fine and Performing Arts, Technology, | 30 credits |
| World Language, Electives |  |

In addition, students must pass MCAS.

## Equal Access Statement

All students are allowed equal access to course offerings provided they have met prerequisites/requirements and classroom space is available.

## **Signing up for an elective does not guarantee you will get into this course. Seniors will be given first preference.

## INTERNSHIP

## Senior Internship

This course is designed to provide real world experience and enhance your skills outside the classroom. An internship is a unique opportunity for students to step into the professional world, gaining practical knowledge and insights by working in a real workplace environment. Students will participate in a paid or unpaid internship. This could also be a work study opportunity if the position fit into the school day schedule. While our school staff will assist in finding an appropriate internship, students are ultimately responsible for finding their own placement. To be eligible, students must fill out an application detailing what type of internship they are interested in and why they are interested in the internship. Students must also maintain good academic standing, successfully pass all coursework and fulfill graduation requirements, ensuring their internship can integrate into their schedule as it will need to replace two academic blocks (periods E \& F). Tailored to individual student needs, this course emphasizes personal and professional growth. Internships do not count toward student GPA or class rank but successful completion will count as ten credits towards graduation requirements. As a final product, students will showcase their experience through a project and presentation, demonstrating the skills and knowledge gained during the placement. Pre-requisite: Completion of application and approval by administration/ guidance counselor

## ENGLISH LANGUAGE ARTS AND READING

The English Language Arts and Reading Department at Somerset Berkley High School offers a comprehensive and rigorous course of study which includes specific core requirements at grades 9 and 10 , expanded core requirements at grades 11 and 12, electives, and reading and literacy supports. Our goal is to educate our students to be analytical readers, coherent writers, critical thinkers, complex problem solvers, and responsible citizens.

## COURSE OFFERINGS:

## English I: Literary Genre <br> Grade 9

H, ACP
110100, 120100
This survey course will focus on the reading of traditional and contemporary short stories, novels, poetry, literary non-fiction and drama. Particular emphasis will be placed on the development of skills needed by students to become independent and fluent readers, writers, researchers, listeners, and speakers. Students will begin their mastery of the following skills: analysis of literature, critical thinking and reading, rhetoric, author's craft, research, and the writing process. Time will be devoted to MCAS preparation.

## English II: American Literature <br> Grade 10 <br> $\mathrm{H}, \mathbf{A C P}$

210100, 220100
This course surveys American Literature from the pre-colonial period to the present and solidly prepares students for Honors or AP English courses at grades 11 and 12. Students will continue their mastery of the following skills: analysis of literature, critical thinking and reading, rhetoric, author's craft, research, and the writing process. Students are challenged to read and analyze literary selections from a humanistic approach that regards literature in context with history, 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.

## English III: Literary Topics Grade 11 <br> $\mathrm{H}, \mathrm{ACP}$

310100, 320100
College professors and heads of businesses have emphatically stated that the most important skills students and/or workers need are reading critically, collaborating to create new knowledge, presenting ideas to an authentic audience, and writing effectively for a wide variety of audiences and purposes. To that end, this course will engage students in the sophisticated analysis of rhetorical strategies used in the best works of fiction and non-fiction. These genres include short stories, narrative and lyric poetry, science fiction, speeches, editorials, journalistic feature articles, contemporary and classical drama, movies, documentaries, digital web-based literature, and novellas and novels. Students will also be expected to apply these rhetorical strategies to create original works in the genre of choice. Moreover, students will conduct original research in an area of interest and produce either a research paper or a project/presentation. Time will be devoted to SAT preparation.

## English IV: Capstone <br> Grade 12

H
410100
English IV, Capstone is a grade 12 course that addresses each of the skills found in the curriculum frameworks for all senior English courses. These essential skills are integrated into a Capstone Project and Presentation. During this project, the Capstone teacher will provide direct instruction, guidance, resources, mentoring and other support as students complete a multifaceted, thoroughly researched, and real-life-based project and authentic presentation. This culminating presentation will be shared with an external audience of peers, teachers, and mentors. Moreover, the Capstone teacher will assist students in finding an appropriate mentor. The course will include: conducting informal and formal research in an area of interest under the guidance of the capstone teacher and mentor; sharing
this research with teachers, fellow capstone students, and a reader/mentor, maintaining a digital portfolio of their process with written reflections; working collaboratively with other capstone teachers and students to ensure that the developing project meets the proficiency requirements stipulated in the school-wide rubrics: Analytic Reading Rubric, Writing Rubric, Problem Solving, Research, Technology, Presentation, and any other rubric as needed; and presenting the Capstone Project before a committee of school and community members.

## English IV: World Literature <br> Grade 12 <br> ACP <br> 420100

This course emphasizes the reading, appreciation and analysis of works selected from the World Canon. Through this comparative approach, students will analyze major themes in literature such as justice, love, truth and identity. Whenever appropriate, historic works may be paired with more contemporary works to illustrate the persistence of universal themes, during ideas, and human intellectual, spiritual, and emotional responses to the internal and external conflicts which undergird the very best of literature. In addition to extensive reading, students will be required to produce a wide variety of writing assignments. The course will include vocabulary work, rhetoric, literary criticism, college essay preparation and a research project.

## AP English Language and Composition

## Grade 11, 12

390100
In this Advanced Placement Course, students will study literary non-fiction, fiction, 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. Students should have earned a grade of A- or better in their prior year English class. All students are required to take the AP exam.

## AP English Literature and Composition

## Grade 11, 12

490100
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 the reader through well-organized evidence drawn from the details of the text. The completion of a summer assignment is a requirement of this course. Students should have earned a grade of A- or better in their prior year English class. All students are required to take the AP exam.

## SOCIAL STUDIES

The goal of the Social Studies Department is to develop responsible, engaged citizens who are prepared to succeed in a 21 st-century global and technological world. The discipline of Social Studies provides content that students will use to understand political, social, and economic issues. It also allows students to hone their skills and apply knowledge to make effective personal and public decisions.

Courses in the Social Studies department stress competence in the following skills:

- Analytical and critical reading of primary and secondary sources
- Research and writing
- Oral presentation
- Historical interpretation and analysis
- Crafting historical argumentation

At each grade level 9-12, students will continue to develop analytical skills using required primary source documents and supplemental readings. Students will be required to interpret and analyze primary source and supplemental readings to develop and refine investigative skills. All students will draw conclusions from information they have found through deciphering primary and secondary source documents.

## Suggested Social Studies Course Program Sequence

$\left.\begin{array}{|l|l|l|l|}\hline \text { Grade 9 } & \text { Grade 10 } & \text { Grade 11 } & \text { Grade 12 } \\ \hline \begin{array}{l}\text { United States History I } \\ \text { AP, H, ACP }\end{array} & \begin{array}{l}\text { United States History II } \\ \text { AP, H, ACP }\end{array} & \begin{array}{l}\text { Modern World History } \\ \text { AP, H, ACP, CP }\end{array} & \begin{array}{l}\text { Electives: } \\ \text { AP Government and Politics } \\ \text { AP European History } \\ \text { Intro Psychology AP, H, ACP } \\ \text { Abnormal Psychology H, ACP } \\ \text { Intro, Econ/Poli Sci H, ACP }\end{array} \\ & & \text { Civics/Financial Literacy } \\ & & \begin{array}{l}\text { Contemp. Issues H, ACP } \\ \text { International Relations H, ACP }\end{array} \\ & \begin{array}{ll}\text { Electives: } \\ \text { AP Government and Politics } \\ \text { AP European History }\end{array} & \begin{array}{l}\text { Intro. Psychology AP, H, ACP } \\ \text { AP Government and Politics } \\ \text { AP European History } \\ \text { Intro Econ/Poli Sci H, ACP } \\ \text { Contemp. Issues H, ACP } \\ \text { ACP }\end{array} & \begin{array}{l}\text { ACPics in History H, }\end{array} \\ \\ \text { Law H, ACP } \\ \text { Special Topics in History H, ACP }\end{array}\right]$

## COURSE OFFERINGS:

## AP U.S. History I

## Grade 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 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. The AP Early American History is equivalent to an introductory college course in U.S. history. Students must enroll by the end of the second week of school due to the advanced curriculum.

## U.S. History I

Grade 9
$\mathrm{H}, \mathbf{A C P}$
110101, 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 concepts of American government, as well as America's westward expansion, the establishment of political parties, economic and social reform. In addition, students will examine the causes and consequences of the Civil War, industrialization, immigration, progressivism and the role of the United States in World War I.

## AP U.S. History II

## Grade 10

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, writing and research in preparation for the United States History Advanced Placement Exam which will be taken in the spring. All students are required to take the AP exam. Prerequisite: Completion of AP US History I and completion of a summer assignment.

## U.S. History II <br> Grade 10

$\mathrm{H}, \mathrm{ACP}$

## 210101, 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 economic history of the Great Depression, goals and accomplishments of the New Deal Era and the various factors that led to America's entry into World War II. In addition, students will study the causes and events of the Cold War, the Civil Rights movement and recent social, political, and economic developments.

## AP Modern World History

## Grade 11

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 circa 1200 CE to the present. Students will analyze and interpret a wide variety of challenging primary and secondary sources. Students will develop proficiency in historical thinking skills. AP Modern World History is designed to be the equivalent of an introductory college or university survey of modern world history. All students are required to take the AP exam. Prerequisite: Completion of a summer assignment.

## Modern World History <br> Grade 11 <br> $\mathrm{H}, \mathrm{ACP}, \mathbf{C P}$ <br> 310101, 320101, 330101

Students will study the period from the Enlightenment to the present time. Major forces such as liberalism, nationalism, and imperialism evident throughout the 19th and 20th centuries will be examined. In addition, the course will proceed with the study of events, concepts, and ideologies associated with revolutions, war and conflict, technological revolutions, and modernization of the 20th century to the present. Diversity of culture and social, political economic developments will be emphasized.

## Civics \& Financial Literacy - taken in conjunction with Physical Education Semester Course

## Grade 11

300001
This course is designed to focus on the rights and responsibilities of American citizens and how to exercise these rights and responsibilities in local, state, and national government. Students will demonstrate civic knowledge, skills and dispositions and complete a project of original work that reflects their understanding of the topics and texts covered in the course. Students will deepen their understanding of what it means to be an informed and engaged citizen living in a democratic society. In addition, components of financial literacy are integrated in this course to better develop student understanding of financial institutions, obligations and commitments. Topics include earning and spending income, saving money, using credit and making investments to allow students to explore and examine making personal economic choices and managing financial assets.

## SOCIAL STUDIES ELECTIVES

## These courses do not count toward Social Studies graduation requirements.

## AP Government and Politics

Grades 10-12
290201
This is an introductory college-level course in U.S. government and politics. Students will analyze the foundations and principles of the US government and the US political processes. By analyzing data and text-based sources, students will examine topics like constitutionalism, liberty and order, civic participation in a representative democracy, competing policy-making interests, and methods of political analysis. Landmark Supreme Court cases will also be explored.
All students are required to take the AP exam. Prerequisite: Completion of a summer assignment.

## AP Psychology

Grades 11, 12
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. The AP Psychology course is designed to be the equivalent of the Introduction to Psychology course usually taken during the first year in college. All students are required to take the AP exam. Prerequisite: Completion of a summer assignment.

## AP European History

Grades 10-12
490201
This course examines the history of Europe from the 15 th 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. AP European History is designed to be the equivalent of an introductory college or university survey of modern European History All students are required to take the AP exam. Prerequisite: Completion of a summer assignment.

## Introduction to Psychology

Grades 11, 12
$\mathrm{H}, \mathbf{A C P}$
310201, 320201
The purpose of this course is to provide the students with the opportunity to gain in-depth knowledge of terminology and conceptual material of Psychology. Areas of concentration for the course 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. Students are required to regularly complete readings, and assignments and contribute during class activities and discussions. Students will be provided a structure for understanding of material through notes, guided discussions, case studies and project-based activities.

## Abnormal Psychology Grade 12 <br> $\mathrm{H}, \mathrm{ACP}$

410201, 420201
The purpose of this psychology course is to provide the students with the opportunity to gain in-depth knowledge of abnormal \& social psychology. It will focus on the diagnosis, causes, and treatment of a wide range of mental disorders. Additionally, it will bring into discussion topics of social psychology theory and applications. The impact of social stigma on mental health will also be a common theme revisited throughout the course. Students will explore psychological concepts in the class through activities, projects, and problem-based learning. Case study analysis, research activities, and a variety of video and films will also be used in guiding analysis and discussion. Introduction to Psychology is not a required prerequisite to take Abnormal Psychology; however, some students choose to take both.

## Introduction to Economics and Political Science <br> Grades 11, 12 <br> H, ACP

310301, 320301
This course is an interdisciplinary introduction to economics and politics, which includes a survey of the basic principles of microeconomics, macroeconomics and political science. Students will examine key economic concepts through simulation 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, the economic role of government, trade, banking, and money. An emphasis will be placed on political thought and ideology, parties, elections, public opinion, public policy and US \& World political systems. Recent trends, issues and problems will be explored to offer differing perspectives of a complex economic and political world.

## International Relations: The World Since 1945

Grades 11, 12
$\mathrm{H}, \mathrm{ACP}$
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, nuclear proliferation, the effects of globalization, and our relations with the international community. 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. Honors students' assignments will require more complex ideas developed within their writing.

## Contemporary Issues <br> Grades 11, 12 <br> $\mathrm{H}, \mathrm{ACP}$

310501320501
This course emphasizes the issues and problems that face the world today. Through the use of magazine and newspaper articles, news media and film, students will analyze various issues that shape the society in which they live. Units of study include but are not limited to terrorism, immigration, the economy, societal problems, politics and racism. Beyond focusing on these specific units of study, students will also be required to keep abreast of current events, demonstrated through class discussions and written summaries. Students will be assessed based on their successful use of skills in extensive writing and analysis, their understanding and ability to be able to put together a comprehensive, sophisticated argument in an oral presentation, and the synthesis of information through
research. The goal of this elective is to provide students with the ability to understand major issues that impact their lives.

## Law <br> Grades 11, 12 <br> $\mathrm{H}, \mathrm{ACP}$

310401, 320401
The course will introduce students to the basics of the American legal system. The course will emphasize Constitutional Law and the rights that it provides to American citizens. Students will explore the areas of freedom of speech, freedom of religion, rights of the accused, rights to privacy and civil rights. An emphasis will be placed on criminal law as students 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 legal analysis of significant legal cases, at times independently. Students will learn to write legal briefs and will participate in debates and mock trials. Honors students' assignments will require more complex ideas developed within their writing.

## Special Topics in History

Grades 11, 12
$\mathrm{H}, \mathrm{ACP}$
310701, 320701
In this course, students have the opportunity to study a topic with a depth that is not available in the standard Social Studies courses. In a seminar format, students prepare for and participate in a range of lively discussions (teacher-led, student -led) that helps equip them for college-level collaboration and engagement. Such preparation involves analyzing primary sources, secondary \& supplemental sources, and various media (such as film, music, and current news). Topics and teachers will vary each year.

## Offered 2024-25 School Year: The Civil Rights Movement, Vietnam War, \& Music As Protest - How Would You Have Lived It?

This course invites students to investigate the richness and complexity of the Civil Rights Movement \& the Vietnam War. Students will explore what it would have been like to experience these time periods, and reflect upon what would have given them the courage and motivation to commit to their beliefs and to make the personal sacrifices sometimes necessary to defend those values. Students will also examine how deeply entrenched a society's beliefs can be, and what is required to change a society that holds those beliefs. A final component of the course will include learning about music as protest, both as individual creations and as key components within a movement.

Offered 2025-26 School Year: The Wampanoag and The Plimoth Colonists: 1620-1678
This course will offer students a deeper understanding of their local history with regard to the events surrounding the establishment of Plimoth Colony and its impact on the indigenous population of present-day Southern New England. Drawing upon a number of primary and secondary sources, representing the perspectives of both groups, students will delve into the evolution of this historical relationship that would lead to the conflict of the King Philip's War. Document readings, research activities, and video resources will support the discussions and progression of the course.

## Offered 2026-27 School Year: US Involvement in Iraq and Afghanistan

Students will start the year by exploring the cultural and political history of present day Iraq and Afghanistan. Students will analyze the following: the conditions that allowed terror organizations to develop, how geography impacts peoples' way of life, and the effects of US involvement. Students will have the opportunity to participate the way they learn best. Discussions in class will be student-driven and student-led. In addition, students will use various forms of media including primary and secondary sources, guest speakers, speeches, short films, maps, and videos to further understand the topics discussed.

## BUSINESS COURSE OFFERINGS

Courses offered are designed to introduce students to various career paths in Business and Office Administration.
CVTE - Refers to courses designated Career Vocational Tech Ed.
DECA - Refers to courses that support 'Distributive Education Clubs of America' activities and goals.

| Suggested Business Course Program Sequences |  |  |  |
| :---: | :---: | :---: | :---: |
| Grade <br> $9-12$ | Business Personal Finance | $\rightarrow$ | Management, Marketing and or <br> Entrepreneurship and Sports/Hospitality Management |
| Grades <br> $\mathbf{1 0 - 1 2}$ | Business Management | $\rightarrow$ | Business Personal Finance, Marketing and or <br> Entrepreneurship and Sports/Hospitality Management |
| Grades <br> $10-12$ | Marketing | $\rightarrow$ | Business Personal Finance, Management and or <br> Entrepreneurship and Sports/Hospitality Management |

## Business and Personal Finance (DECA) (CVTE)* <br> Grades 9-12 <br> $\mathrm{H}, \mathrm{ACP}$

610205, 620205
This course is designed to help students learn and apply valuable life skills in money management, career planning, budgeting, credit, and banking services. Content will include the importance of identifying individual values and how they affect one's ability to share, save, and spend, as well as, an analysis of proper goal setting. A consideration of how the economy affects individual decisions, the difference between needs and wants, job search skills, interviewing techniques, preparing resumes and cover letters, the benefits of entrepreneurship, consumer rights and responsibilities. Additionally, students will study investing strategies and stock market analysis. Students will then take part in a Stock Market Game. Students will also learn to complete individual federal tax returns.

## Business Management (DECA) (CVTE)* Grades 10-12 <br> $\mathrm{H}, \mathbf{A C P}$

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 will also be required to complete a research project on various business-related topics of theory and practice as well as individual case study analysis. Students are given an opportunity to participate in the DECA competencies based on NBEA standards for competitive events that can lead to college scholarships. Twenty-first-century skills and frameworks are an integral part of the program of applied learning.

## Marketing (DECA) (CVTE)* <br> Grades 10-12 <br> $\mathrm{H}, \mathbf{A C P}$

610705, 620705
This course will concentrate on the study of the definitive marketing functions of selling, promotion, distribution, product/service management, pricing, purchasing, marketing information management \& research, product \& service planning and financing. In doing so, economic foundations, business and marketing concepts as well as human resource applications are stressed throughout instruction. Students will also be required to complete a research project on various business-related topics of theory and practice as well as individual case study and/or role play analysis. Integrated DECA competencies for competitive events are designed around the (NBEA)

National Business Education Association standards and Massachusetts state frameworks. 21 st-century skills are an integral part of the program of applied learning.

## Entrepreneurship and Sports/Hospitality Management (DECA) (CVTE)* Grades 10-12 <br> $\mathrm{H}, \mathrm{ACP}$

612053, 622053
Students will participate in a wide range of group activities designed to build small business skills and knowledge and to develop critical thinking and life skills. Students will learn to identify and develop the necessary business skills to open their own businesses, scan the community for small business opportunities, and prepare a business plan. Students will also explore a couple of the most explosive and dynamic career paths in the sport and hospitality industry available today that will open the door for college or entry-level industry positions. Careers in the hospitality industry include hotels \& lodging, food \& beverage, recreation \& attractions, and travel \& tourism. Sports/Entertainment focuses on the understanding of marketing concepts and theories that apply to the sports \& entertainment industry. Course content will be delivered through class discussion, role plays, lecture presentations, internet research, guest speakers, field trips, and major class projects. The co-curricular organization DECA is an opportunity for students interested in challenging their newly acquired business skills.

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## MATHEMATICS

## Mathematics Dept. Calculator Policy:

To follow the Massachusetts Common Core 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 Core Values and Beliefs Statement, that each student comes 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 not necessary for Algebra 1, but are sufficient for Geometry and Algebra 2 courses. Graphing calculators are encouraged for Precalculus and Calculus. Graphing calculators are required for AP Statistics. The TI-84+CE 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 MCAS, ACT, PSAT and the SAT 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 and the AP Statistics exam.

## Mathematics Dept. Summer Packet Policy:

In order to have students maintain content knowledge, summer packets are assigned at the end of the school year for AP classes only. The summer packets are due the first Friday after school begins. There are no exceptions. All summer packets are on the math department website shsmath.webnode.com and can also be accessed at the Somerset Berkley Regional High School website somersetberkley.org.

## Doubling Courses Policy:

Any student entering grade 10 who wishes to double up and take Honors Geometry and Honors Algebra 2 concurrently must have a minimum average of A-in Algebra 1 AND have a teacher recommendation.


## COURSE OFFERINGS:

## Algebra I <br> Grade 9 <br> $\mathrm{H}, \mathrm{ACP}$

110103, 120103
The concepts of algebra are introduced with an examination of the structure and the techniques of algebra, linear equations, factoring, systems of equations, quadratic equations, inequalities, graphing, radicals, rational functions, probability, and statistics. Real-world applications are integrated throughout the course.

## Geometry

Grade 9, 10
$\mathbf{H}, \mathbf{A C P}$
210103, 220103
This course covers the definitions, postulates, and theorems of plane geometry using a rigorous approach. Plane geometry, deductive reasoning and logic, areas and volumes of the 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 1. Students entering grade 9 who wish to take Honors Geometry must have successfully completed Algebra 1 in grade 8.

Algebra II
Grades 10, 11
$\mathrm{H}, \mathbf{A C P}$
310103, 320103
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, radical functions, polynomial functions, rational functions, exponentials and logarithms. Students should have successfully completed Algebra 1 and Geometry.

## Model Mathematics III

Grade 11
CP
330103
It is in the Model Mathematics III course that students integrate and apply the mathematics they have learned from their earlier courses. The main focus is on four critical areas: (1) apply methods from probability and statistics to draw inferences and conclusions from data; (2) expand understanding of functions to include polynomial, rational, and radical functions; (3) expand right triangle trigonometry to include general triangles; and (4) consolidate functions and geometry to create models and solve contextual problems. Students should have successfully completed Algebra 1 and Geometry.

## AP Precalculus

Grades 11,12
390204
In AP Precalculus, students explore everyday situations and phenomena using mathematical tools and lenses. Students study each function type through their graphical, numerical, verbal, and analytical representations and their applications in a variety of contexts. Students apply their understanding of functions by constructing and validating appropriate function models for scenarios, sets of conditions, and data sets, thereby gaining a deeper understanding of the nature and behavior of each function type.
Prerequisite: Successful completion of Honors Algebra 2 and teacher recommendation.

## Precalculus with Trigonometry

Grades 11, 12
$\mathrm{H}, \mathbf{A C P}$
410103, 420103
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, polar coordinates, limits and series. Students should have successfully completed Algebra 2.

## AP Statistics

Grades 10, 11, 12
390203
This course is designed to cover the syllabus for Advanced Placement Statistics as prescribed by the College Entrance Examination Board. Students are expected to take the AP Statistics exam in the spring when the course concludes. A TI-84 Plus CE is required for use in this course. Topics include exploring data, sampling and experimentation, anticipating patterns and statistical inference. Students should have successfully completed Geometry and should be taking or have taken Algebra 2.

## Statistics

Grade 12
H, ACP
410203, 420203
This course is a multi-level offering with Advanced College Prep Statistics. The Honors section will have extra assignments and different assessments than the Advanced College prep course. This course specifically addresses the tenth and twelfth-grade Massachusetts Common Core Mathematics Frameworks in Data Analysis, Statistics, and Probability. Students enrolled in this course are assumed to have mastered the concepts outlined in the Algebra 2 standards of the Common Core 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 2 or Model Math III.

## AP Calculus

## Grade 12

490303
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-84 Plus CE 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 to 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 Honors Pre-Calculus and have a teacher recommendation.

## Math Applications

## Grade 10

230203
This course emphasizes instructional strategies for students who struggle in mathematics. They will be provided support, organization skills and strategies to strengthen their skills in math and across curricula. There will be an emphasis on the Learning Standards of the six conceptual categories of the Massachusetts Mathematics Common Core Curriculum Framework: 1.) Number and Quantity, 2.) Algebra, 3.) Functions, 4.) Modeling, 5.) Geometry, and 6. 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.

## SCIENCE \& TECHNOLOGY

The science program offers strong traditional core science courses such as Physics, Chemistry, and Biology. Offered electives include Environmental Science, Human Anatomy and Physiology, and a variety of Project Lead the Way and Advanced Placement Courses. Colleges and universities traditionally consider Physics, Chemistry, and Biology, as single-discipline lab courses serving as the foundation of any science program.

In addition to providing their own colored pencils, notebooks, book covers, binders, binder paper, rulers, and writing instruments as required by individual teacher expectation sheets, students are required to have their own scientific calculator (TI-30XIIS or equivalent).

## Suggested Sequence of Courses

| Level |  | Grade 10 Core | Grade 11 <br> Core \& Electives | Grade 12 <br> Core \& Electives |
| :---: | :---: | :---: | :---: | :---: |
|  | $\overline{\text { Intr }}$ | Chemistry | Biology | ACP Physics ACP Anatomy and Physiology ACP Environmental Science PLTW Courses |
| Honors | Int | Option 1: One Course <br> Chemistry or AP Chem <br> Option 2: Double Up <br> Chemistry and <br> Biology | Option 1: One Course <br> Biology or AP Biology <br> Option 2: Double Up <br> Biology or AP Biology <br> and <br> Honors Physics, AP <br> Chemistry, or AP <br> Environ. Science | AP Biology AP Chemistry AP Environmental Science AP Physics H Environmental Science H Physics H Anatomy and Physiology PLTW Courses |
| Suggested Health and Biomedical Innovation Pathway | $\begin{array}{r} \text { Intro } \\ \text { Ph } \\ \text { (any } \\ \text { Princ } \\ \text { Prion } \\ \text { Sc } \end{array}$ | Chemistry <br> (any level) <br> andPrinciples of Biomedical <br> Science <br> orHuman Body Systems | Biology (any level) and Human Body Systems or | Medical Interventions and/or Biomedical Innovation <br> Electives (any level) Internship |
| Course |  | Pre-Requisites(see course descriptions for more detailed information) |  |  |
| Introductory <br> ( $\mathrm{H}, \mathrm{AC}$ <br> Departmen <br> Cours | hysics <br> Core | - For Honors, students should have a minimum average of B in Honors Math and Science in grades 7 \& 8. <br> - All Introductory Physics level selections should match Freshman Math level selection. <br> - Changes may be made to student's course selection based on teacher recommendations and Middle School MCAS Scores. |  |  |
| Chemis <br> (All Lev <br> Departmen <br> Cours |  | - For Honors, students should have a minimum average of B+ in Honors Math and Science in grades 9,10 , or 11 . <br> - All Chemistry level selections should match Sophomore or Junior Math level selections. |  |  |
|  |  | - For Honors, students should have a minimum average of B+ in Honors Math and Science in grades 9 or 10. <br> - All Biology level selections should match Sophomore or Junior Math level selections. |  |  |


| Physics | $\bullet$ For Honors, students should have a minimum average of B+ in Honors Math and Science in <br> grades 9,10 and 11. <br> All Physics level selections should match Sophomore, Junior or Senior Math level selections. <br> However, Algebra II must have been successfully completed. |
| :---: | :--- |
| Anatomy and <br> Physiology | • Successful completion of Department Core Courses |
| Environmental <br> Science | • Successful completion of Department Core Courses |
| IP/PLTW | - In conjunction with or successful completion of Department Core Courses |
| AP Biology | - Successful completion of Chemistry and Biology |
| AP Chemistry | - Successful Completion of Honors Introductory Physics and Honors Math |
| AP Environmental | - Successful completion of Department Core Courses or Concurrent Enrollment in Honors |
| Scionce |  |

## COURSE OFFERINGS:

## Introductory Physics

Grade 9
H, ACP
110104, 120104
Introductory Physics Grade 9 H, ACP 110104, 120104, This course is a study of kinematics, forces, momentum, energy, thermodynamics, electricity, and waves 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. This course is designed to prepare students to take the Introductory Physics MCAS. Introductory Physics level selection should match Freshman Math level selection. Changes may be made to student's course selection based on teacher recommendations and MCAS Scores.

## Chemistry

Grades 10
$\mathrm{H}, \mathrm{ACP}$
210204, 220204
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, Periodic Table trends, chemical bonding, chemical reactions, stoichiometry, gas laws, and thermochemistry. A variety of experiments are performed, and the data analyzed to reveal scientific patterns that enhance the student's learning experience. All Chemistry level selections should match Sophomore or Junior Math level selections. Students are required to have their own scientific calculator (TI-30XIIS or equivalent)


#### Abstract

Biology Grade 10, 11 H, АСР, CP 310104, 320104, 330104 This 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.


## AP Biology

## Grades 11, 12

490104
The advanced placement biology course is a certified College Board course that follows the AP Biology curriculum established by the College Board. Topics include The Chemistry of Life, Cell Structure and Function, Cellular Energetics, Cell Communication \& Cell Cycle, Heredity, Gene Expression and regulation, Natural Selection, and Ecology. 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, and laboratories. A student's success will depend on the time and effort that is invested into this course. (Students should have successfully completed chemistry and biology.) It is also recommended that students concurrently enroll in PLTW Human Body Systems if it fits in their schedule. This course is designed to prepare students for the College Board AP Biology exam. Students are required to have their own scientific calculator (TI-30XIIS or equivalent).

## AP Chemistry

Grades 10-12
490204
The advanced placement chemistry course is a certified College Board course which follows the AP Chemistry curriculum established by the College Board. Topics include: Atomic Structure and Properties, Molecular and compound structure and Properties, Intermolecular Forces and Properties, Chemical Reactions, Kinetics, Thermodynamics, Equilibrium, Acids and Bases, and Applications of Thermodynamics. 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, and laboratories. A student's success will depend on the time and effort that is invested into this course. Accordingly, the course is a progression of topics that are conceptually and sometimes mathematically challenging. A mastery of algebra/trigonometry is strongly recommended for the success of the student. The laboratory investigations provide students with experience in chemical techniques and the use of instrumentation. All the required labs are college-level experiments that require intensive analysis and discussion. (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. Students should have completed a first-year chemistry course prior to taking this course. Students are required to have their own scientific calculator (TI-30XIIS or equivalent).

## AP Environmental Science

Grade 12
The Advanced Placement Environmental Science (A.P.E.S.) course is a certified College Board course and follows the A.P.E.S. curriculum established by the College Board. This course is an interdisciplinary and in-depth study of Earth Systems, Ecosystem Dynamics, Energy and Land Resources, and Pollution. Material will be covered through daily class activities, lectures, discussions, laboratories, and projects. Some laboratory exercises will include an outdoor component. Students enrolling in the A.P.E.S. course should have a strong or concurrent foundation in biology, chemistry, and Algebra 1. This course is designed to prepare students for the College Board A.P. Environmental Science Exam.

## AP Physics

## Grade 12

490304
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, and trigonometry, and should have a basic understanding of calculus, which should be taken concurrently. The course is an in-depth study of mechanics, including kinematics/dynamics, energy, momentum, rotational kinematics/dynamics, gravitation, and oscillations. 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. Students are required to have their own scientific calculator (TI-30XIIS or equivalent).

## INNOVATION PATHWAYS, PROJECT LEAD THE WAY \& STEM ELECTIVES

In the Science Department at SBRHS, it is our goal to offer full-time and part-time courses, to all our students that broaden their knowledge base in scientific literacy across the curriculum and areas that are conducive to Innovation Pathways, Project Lead the Way, and STEM initiatives at the community, national, and global levels in order to prepare our students for our nation's economic competitiveness and the related need for education programs in support of future generations.

## PLTW BIOMEDICAL SCIENCES PATHWAY

SBRHS Science and Technology/Engineering Department offers a 4-year pathway in Health or Biomedical
Science. Students in this pathway will take the following courses, one each year, beginning as freshmen:

- Principles of Biomedical Science - available to all students
- Human Body Systems - available to upperclassmen
- Medical Interventions - available to upperclassmen who have successfully completed Principles of Biomedical Science
- Biomedical Innovation - Capstone, available to students who have successfully completed Principles of Biomedical Science, Human Body Systems, and Medical Interventions
The Biomedical Science Program requirements indicate that students are expected to take grade level appropriate mathematics and science classes each year concurrent with Biomedical courses. The Biomedical Science classes do not replace Introductory Physics, Chemistry or Biology core classes. Students looking to go into a biomedical career need these sciences as well. Also, please note that all students must take and successfully pass the Science and Technology/Engineering MCAS exam in Introductory Physics or Biology as a requirement for graduation. Additionally, it is expected that this program will connect students to courses and experiences that promote career exploration and readiness. Biomedical Science Staff will work collaboratively to create an instructional program that is rooted in project-based learning and that fosters partnerships with professionals that will expand on the opportunities for SBRHS students. All PLTW classes have a national End of Course Exam (EOC), which helps students potentially qualify for college credits and scholarships. Students who successfully complete Principles of Biomedical Science, Human Body Systems, and Medical Interventions will have completed the Biomedical Pathway.


## Principles of Biomedical Science (PLTW)

Grades 9-12
In this laboratory course, students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems. Prerequisite: This class is open enrollment to any student at any level and is taken in conjunction with or successful completion of Department Core Courses.

## Human Body Systems (PLTW) <br> Grades 10-12

800102
In this laboratory course students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases. Science Prerequisite: This class is open enrollment to any student at any level and is taken in conjunction with or successful completion of Department Core Courses.

## Medical Interventions (PLTW) Grades 11-12

In this laboratory course students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Prerequisite: This class is open to students who have successfully completed Principles of Biomedical Science and is taken in conjunction with or successful completion of Department Core Courses.

## Biomedical Innovations (PLTW):Capestone

Grades 11-12
In the final laboratory course of the Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21 st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent design project with a mentor or advisor from a university, medical facility, research institution or other institution related to the topic within the surrounding communities. Prerequisite: This class is open to students who have successfully completed Principles of Biomedical Science, Human Body Systems, and Medical Interventions and is taken in conjunction with or successful completion of Department Core Courses. This class serves as a Capstone Class.

## Environmental Science: Capstone (STEM) <br> Grade 12

H
410504
The primary role of this lab and field-oriented course is to allow seniors the advantage to utilize information they have previously attained in their Introductory Physics, Biology, Chemistry, and math courses and apply that knowledge to this interdisciplinary science. This course focuses on the scientific method, designing your own experiments, environmental law/policy, environmental problems, and ecology. Students will also concentrate on invasive and endangered species, biodiversity, energy resources and methods, water properties and biomes, atmospheric science, and soil ecology. In this course, students will be asked to come up with an environmental problem and develop a yearlong project to investigate said problem whether that pertains to local or federal environmental law, global climate change, endangered species, or energy resources, the choice is yours! During this project, the Capstone teacher will provide direct instruction, guidance, resources and other support as students complete a multifaceted (paper, experiment, and presentation) project. The presentation will conclude on/around Earth day in front of their peers, faculty, and local environmental officials. This class serves as a Capstone Class.

## Environmental Science (STEM) <br> Grade 12 <br> ACP

The primary role of this lab and the field-oriented course is to allow seniors the advantage to utilize the information they have previously attained in their Introductory Physics, Biology, Chemistry, and Math courses and apply that knowledge to this interdisciplinary science. This course focuses on the scientific method, designing your own experiments, environmental law/policy, environmental problems, and ecology. Students will also concentrate on invasive and endangered species, biodiversity, energy resources and methods, water properties and biomes, atmospheric science, and soil ecology. This class encourages and enhances students' extended field science skills and knowledge. The theoretical aspect is taught through the classroom while the fieldwork applies to the outdoor nature of some labs and projects.

## Human Anatomy and Physiology (STEM) Grade 12 <br> $\mathrm{H}, \mathrm{ACP}$

410404, 420404
This challenging course will familiarize students with the anatomy, physiology, and histology of the human organ systems. Students interested in a biology, pre-medical, or pre-dental college program should consider taking this course. Students should have successfully completed the department's core courses.

## Physics (STEM)

Grades 11, 12
$\mathbf{H}, \mathbf{A C P}$
310304, 320304
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 in one and two dimensions, dynamics, circular motion, conservation of momentum and energy, and electricity. Students should have successfully completed Algebra II.

## TECHNOLOGY AND DESIGN COURSE OFFERINGS

## Engineering Design

Grades 9-12
610106
Students will examine the steps of the engineering design process and produce original proposals for a variety of design challenges aligned to the United States Super STEM Competition (USSSC). "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. Engineering Design learning goals offer grade $9-12$ students a hands-on understanding of our human-built world such as Aerospace, Transportation, Agriculture, Manufacturing, Sports, Clean Energy, Architecture and more. The safe use of materials, power tools and machines highlights the student's engineering experience along with engineering software. Development of our Engineering Design curriculum uses the national Standards for Technological and Engineering Literacy (STEL) as published by the International Technology Education and Engineering Association (ITEEA).

## Graphic Design

Grades 9-12
610306
Graphic design is all around us! Words and imagery are the elements that carry the majority of content in the printed and digital worlds. In this course, students learn the fundamental principles of graphic design, including the elements and principles of design, composition and layout, photo editing, image manipulation, and an introduction to vector illustration.In this course, students will be introduced to graphic designers and movements both contemporary and historic. A wide variety of design tools are used including, but not limited to G-Suite applications, Adobe Creative Cloud applications, and web or mobile-based design applications.The Graphic Design lab is a creative, collaborative, and productive work environment. Students actively participate in the Engineering Design process: questioning, researching, imagining, planning, creating, testing and improving. Students receive feedback from the course instructor and participate in frequent, constructive,
peer-reviews. Career connections are made in several of our project units as well. Regardless of their future field of study, this course provides students with the opportunity to learn and apply practical, real-world visual design skills in their personal, academic and work lives.

## Advanced Graphics Design <br> Grades 10-12

## H

610706
This course is available to students upon successful completion of Graphic Design I. Advanced students build upon their knowledge and skills previously acquired. Students implement the elements and principles of design in their work at a higher level and recognize these elements and principles in professional graphic designs. Students are introduced to more complex photo-editing and vector illustration tools. Students continue working in G-Suite applications, industry-standard Adobe Creative Cloud applications, and popular web or mobile-based design applications. Various career connections are made as students design and print projects in specialized areas such as typography, product packaging, travel and tourism, film and television, event-marketing and business branding. This project-based course models the current 'design to market' manufacturing and communications. Students collaborate to produce both printed and digital work. As a primary source of assessment, students build and maintain digital portfolios to showcase their high school work. Prerequisite: Successful Completion of Graphics Engineering.

## Robotic Engineering

Grades 9-12
610206
In Robotic Engineering, students learn engineering concepts through hands-on experience and discovery. Students design, build and program physical, autonomous robots. Through the engineering design process, student teams collaborate to research, brainstorm, create, test and revise creative technology solutions to real-world problems, as well as examine the impact of robotic innovation in our society. Students also program and fly both virtual and physical drones to complete missions in real-world scenarios, as well as examine their impact on existing industries. As an alternative to block coding, students learn basic Python coding in a game-based environment to program both the robots and drones. Skills acquired in Robotics Engineering such as resilience, problem-solving, creativity, teamwork and communication are transferable to any career.

## Intro to TV Media Production Grades 9-12

601103
This course will provide students with an introduction to the skills and practices of on-location and in-studio video production. Students learn to use industry terminology and experience both the creative and technical aspects of video production. Working on both sides of the camera, students will learn skills associated with the three basic stages of project creation: pre-production, production, and post-production. These skills include scriptwriting, camera setup and filming techniques, video editing, and in-studio operations. Throughout the year, students will create a variety of video projects including an in-studio show. This class will be held in the new state-of-the-art TV production studio and iMac computer lab. The programs that are produced will be used by the school and the community. Students who elect to take this class may participate in taping and covering a wide array of events after school hours for community service.

## Advanced TV Media Production Grades 10-12

H
603103
Second Year of Study: This course will provide students with the opportunity to continue to develop and refine the skills necessary for TV production. They will learn advanced filming and editing skills and explore the world of news and documentary. Students will learn how to create a newscast from start to finish, from research and scriptwriting to filming segments, and recording the in-studio show. Students will learn to direct, produce, operate in-studio equipment, and perform as on-air talent. Students will produce programs that will be used by the school and the community as well. This class will be held in the TV production studio and iMac computer lab. Students who elect to take this class may participate in taping and covering a wide array of events after school hours for community service. Prerequisite: Successful completion of Intro to TV Media Production.

Third Year of Study: This is a production course that draws on the skills of all previous production courses. Students are provided with the opportunity to produce professional quality work and refine and enhance their production skills. Students who elect to take this class may participate in taping and covering a wide array of events after school hours for community service. Prerequisite: Successful completion of Intro to TV Media Production and Advanced TV Media Production Second Year of Study demonstrating proficiency of skills and independence. Teacher approval is required.

## Video Game Creation

Grades 9-12
604101
Students enrolled in this class will learn the principles and elements of video games. They will explore what a game is and analyze what makes a game a game. Students will use several game development platforms to design and build their own playable games including 8 -bit style games, multiplayer games, and story games.

# INNOVATION PATHWAYS \& PROJECT LEAD THE WAY COURSES 

Computer Science Essentials (PLTW)
Grades 9-12
800201
Computer Science Essentials exposes students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. Students use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python® to create apps and develop websites, and learn how to make computers work together to put their design into practice. They apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them.

## Computer Science Principles (PLTW)

## Grades 10-12

800202
Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. While this course can be a student's first in computer science, students without prior computing experience are encouraged to start with Introduction to Computer Science. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation. PLTW is recognized by the College Board as an endorsed provider of curriculum and professional development for AP® Computer Science Principles (AP CSP). This endorsement affirms that all components of PLTW CSP's offerings are aligned to the AP Curriculum Framework standards and the AP CSP assessment. Prerequisite: Successful completion of PLTW CS Essentials, Robotic Engineering, or Video Game Creation.

## AP Computer Science A (PLTW)

 Grades 10-12800203
Computer Science A focuses on further developing computational thinking skills through the medium of Android ${ }^{\mathrm{TM}}$ App development for mobile platforms. The course utilizes industry-standard tools such as Android Studio, Java ${ }^{\mathrm{TM}}$ programming language, XML, and device emulators. Students collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and Web-based databases. This course aligns with the AP CS A course. Prerequisite: Successful completion of PLTW CS Essentials, Robotic Engineering, or Video Game Creation.

## Cybersecurity (PLTW)

Grades 10-12
800204
Cybersecurity introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely. Prerequisite: Successful completion of PLTW CS Essentials, Robotic Engineering, or Video Game Creation.

## WORLD LANGUAGES

In order to satisfy most college's entrance requirements for world 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: Spanish or Portuguese.

If an incoming Freshman student with a minimum of 1 -year prior experience, would like to be placed into a second-year course, the student must pass the Year 1 Final exam with a score of 85 or better. The student must also complete an oral proficiency exam in the target language. Please contact the Content Coordinator or the Guidance Department regarding this course change.

## Summer Assignment Expectations:

The following World Language Honors courses have summer assignments associated with them: Portuguese II Honors, Portuguese III Honors, Portuguese IV Honors, Spanish II Honors, Spanish III Honors and Spanish IV Honors. These are assignments that require students to work independently during the summer months. All assignments are due by the assigned date and will be part of the term 1 grade for the student. Failure to follow directions will result in the student receiving a " 0 ". In addition, the students will be assessed on the knowledge gained during the summer assignment process in subsequent assessments.

## COURSE OFFERINGS:

## Portuguese I

$\mathrm{H}, \mathbf{A C P}$
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. It is also important to note that the students in an Honors course are expected to perform at mastery level with regards to grammar, application, and fluency while moving at a quicker pace.

## Portuguese II

H, АСР
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. It is also important to note that the students in an Honors course are expected to perform at mastery level with regards to grammar, application, and fluency while moving at a quicker pace.

## Portuguese III

$\mathrm{H}, \mathbf{A C P}$
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. It is also important to note that the students in an Honors course are expected to perform at mastery level with regards to grammar, application, and fluency while moving at a quicker pace.

## Portuguese IV

H, ACP
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. It is also important to note that the students in an Honors course are expected to perform at mastery level with regards to grammar, application, and fluency while moving at a quicker pace.

## Spanish I

$\mathrm{H}, \mathrm{ACP}$
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. It is also important to note that the students in an Honors course are expected to perform at mastery level with regards to grammar, application, and fluency while moving at a quicker pace.

## Spanish II

$\mathrm{H}, \mathrm{ACP}$
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. It is also important to note that the students in an Honors course are expected to perform at mastery level with regards to grammar, application, and fluency while moving at a quicker pace.

## Spanish III

H, ACP
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. It is also important to note that the students in an Honors course are expected to perform at mastery level with regards to grammar, application, and fluency while moving at a quicker pace.

## Spanish IV

H, ACP
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. It is also important to note that the students in an Honors course are expected to perform at mastery level with regards to grammar, application, and fluency while moving at a quicker pace.

# Fine and Performing Arts 

## ART COURSE OFFERINGS

## Ceramics

Grades 9-12
620108
First year ceramic students will be introduced to the craft of hand building. The focus will be on tile making, slab boxes, pinched pots, coiled vessels and clay jewelry. Some projects will be supported by historical references. Students will explore the techniques of low relief carving, piercing, modeling and stamping. Students will investigate the stages of clay bodies, glazing and the firing process. In addition, students will be introduced to the potter's wheel to explore the throwing process.

## Drawing \& 2-Dimensional Design

Grades 9-12
621208
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.

## Fashion and Textile Design

 Grades 9-12605164
This is a beginning course for designers looking to develop their skills in the areas of color, pattern design, fabric construction and fashion illustration. Students will create their own prints and patterns using beginning textile processes such as stamping, printing, and fabric dyeing. Students will explore the elements of art and principles of design in a series of projects that move from two-dimensions to three-dimensions. Hand stitching and machine sewing will be introduced as students progress from making prints to creating apparel, fashion and/or interior accessories. Sustainability, fashion forecasting, color theory, and textile designers and fashion designers (both past and present) will be researched and discussed in class. Students will maintain a sketchbook throughout the year with their ideas, sketches and fashion illustrations.

## Glass and Metal Arts

Grades 9-12
622108
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.

## Interior Design

## Grades 9-12

In this course, students will learn the fundamentals of interior design through the creation of technical and observational drawings, floor plans, 3D models of interior spaces, and digital designs. Students will also learn how to share their designs by creating mood boards, design schematics, and mock client presentations. Students will also explore and analyze historic interior design styles, cultural influences, and current design trends.

## Digital Photography

## Grades 10-12

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 use the classroom lighting studio to create portraits. In addition, students will learn basic photo editing techniques, and
create a digital portfolio of their work. This course will culminate in the creation of a photo essay of the student's choosing. This course will require significant photography work outside the classroom. Students must provide their own smartphone camera as a requirement for this course.

## ADVANCED STUDIO COURSE OFFERINGS

## Advanced Ceramics

## Grades 10-12

H
610508
Second Year of Study: Students will continue to explore the process of hand building and wheel throwing. They will study and then implement wheel and hand-built vessels, be responsible for mixing and procuring glaze formulations, and investigate the possibilities of community connections through the arts. Projects will be self-directed, include historical references, and be unified in regard to artistic presentation and personal style.

## Advanced Drawing

## Grades 10-12

H
611508
Second Year 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.
Third Year 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.

## Advanced Digital Photography

Grades 11, 12
H
610105
Second Year of Study: In this course, students will build upon knowledge from Digital Photography. We will work with the technical aspects of using the DSLR camera while emphasizing the use of photography for expressive and narrative purposes and as a vehicle of communication. After the students work through a series of concept-based assignments focusing on abstraction, communicating ideas and alternative photo processes, the course will culminate in a photo essay of the student's choosing. Emphasis will be placed on analyzing other photographer's work and understanding how photography plays an important role in history and culture. Each student will work to develop their own artist's statement and display a body of work from their photography portfolio.

Third Year of Study: The third year of study will again focus on the technical aspects of controlling the camera for expressive and narrative purposes and as a vehicle of communication. Students will work on in-class assignments, but the emphasis of this course will be on a series of photo essays and explorations designed by the student. Independent research of photographers and photo analysis will be required. Personal reflection and individual and group critique will be expected as students engage in work that will demonstrate technical, compositional and conceptual skills.

## Advanced Fashion and Textile Design Grades 10-12

H
615164
Second Year of Study: This is a course for student designers who have taken Intro to Textiles and Fashion Design. Students will develop their skills in the areas of color theory, repeat patterns, printing methods, and fabric construction using hand and machine sewing methods. Students will create their own fabric collections, building upon their knowledge of stamp creation, printmaking, dyeing, stencil design and more. Digital imaging/printing and fashion illustration will be incorporated. Contemporary fiber artists, textile designers and fashion designers will be integrated throughout the course. Students will explore career connections in the field of fashion such as design, styling, production, retail merchandising and more. Students will use and create sewing patterns/templates to create apparel and home accessories while maintaining a sketchbook of ideas and fashion illustrations.
Third Year of Study: The third year of study requires a thorough understanding of the skills, techniques and concepts 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 in machine sewing/hand stitching/surface design. An emphasis will be placed on rendering of fabrics and research of textile and fashion designers both historic and contemporary.

## Advanced Glass and Metal Arts <br> Grades 10-12

H
612508
Second Year 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.
Third Year 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 that 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.

## Advanced Interior Design Grades 10-12

H
Second Year of Study: In this course, students will build upon the fundamentals of interior design that were taught in Interior Design through the creation of technical and observational drawings, floor plans, 3D models of interior spaces, and digital designs. Students will also learn how to share their designs by creating mood boards, design schematics, and mock client presentations. Students will also explore and analyze historic interior design styles, cultural influences, and current design trends.

## AP Studio Art: Advanced Photography

Grades 11, 12
690105
AP Studio Photography is designed for highly motivated photo students who are interested in creating a portfolio that will be evaluated by the Advanced Placement College Board. We will work with the technical aspects of using the DSLR camera while emphasizing the use of photography for expressive and narrative purposes and as a vehicle of communication. Students work through a series of concept-based assignments focusing on abstraction, communicating ideas and alternative photo processes, but the emphasis of this course will be on a series of photo essays and explorations designed by the student. Students will engage in research of photographers and analysis of their work. Personal reflection and individual and group critique will be expected as students create work that will
demonstrate technical, compositional and conceptual skills. Students accepted into this program will be expected to do independent work over the summer. 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 must have an A- or above (or teacher approval) in Digital Photography or Advanced Digital Photograph.

## MUSIC COURSE OFFERINGS

Music gives a soul to the universe, wings to the mind, flight to the imagination and life to everything. Our music department allows you to grow in creativity, expression, confidence, leadership, teamwork, and many other lifelong skills. Studying music can enhance verbal memory, spatial reasoning and literacy skills. Music ensembles provide not only learning opportunities but a community and family all its own.

## Popular Music

610107
Grades 9-12
In this course, students will explore popular music genres by analyzing current artists and their connections to past musicians. Through case studies of popular music acts, students will learn about creative techniques used to innovate within genres, while still paying homage to traditions. Additionally, students will learn to identify trends, understand genre history, and examine how music gains popularity.
The course will cover the evolution of popular music through the lens of today's musicians. Students will study everything from rock and roll to hip-hop, pop, k-pop, and musical theater. By engaging critically with popular music, students will develop their perspectives on the meaning and value of different genres, and gain a deep understanding of popular music as a cultural phenomenon and a powerful force in shaping our society.

## History of Broadway <br> Grades 9-12

620207
History of Broadway is a music elective that exposes 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.

## Music Production and Engineering

Grades 9-12
600207
Music Production and Engineering is designed for the student who is interested in learning how to create and record music. Throughout the course, students will take on the role of producer and will learn how to create, manipulate, and sequence traditional and computer generated sound. They will investigate online resources and work with software programs such as Bandlab, Garageband, Audacity and Logic to create music without performing on traditional instruments. As the course progresses, students will also explore creating original scores for films, television, and video games. No experience necessary.

## Advanced Music Production and Engineering Grades 10-12

H
Second Year of Study: A continuation of Music Production I. Students will learn advanced music production techniques and gain further mastery of various digital audio workstations (DAWs). The course will focus on mixing and mastering digital and recorded audio and songwriting. Students will also have opportunities to submit their work to state and national competition contests. Prerequisite: Successful completion of Music Production and Engineering or prior approval from content coordinator

Third Year of Study: A continuation of the work that is done in Music Production II. Students will work on independent projects and will be encouraged to submit their work to local and national composition competitions. Emphasis will be placed on producing long-form projects like EPs, movie scores, etc. Prerequisite: Successful completion of Advanced Music Production and Engineering or prior approval from content coordinator.

600208

## Vocal Techniques

Grades 9-12
605113
This class is designed to provide students with the fundamental techniques of singing and performing. Music of all styles 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 differentiated to meet student needs. No previous singing experience is required but the student must be willing to sing out loud in front of the class in order to progress in the course.

## Theater Techniques

## Grades 10-12

605056
This class is designed to provide advanced students with the opportunity to further their mastery of theater arts. This class will encompass singing, acting, writing, directing, and stage movement. Students will expand their individual abilities with both solo and class performances. Students will also develop skills necessary to become an independent musician, director, and actor. No previous theater experience is required but the student must be willing to perform for the class in order to progress in the course.

## Piano

## Grades 9-12

601107
The purpose of this class is to introduce keyboard skills to beginning students and develop technique in intermediate and advanced level students. The class is recommended for all Instrumental and Choral 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 electronic keyboards and accessories as well as music software in the Music Technology Lab.

## Advanced Piano

## Grades 10-12

601207
Second Year: The purpose of this class is to continue on the skills taught during piano I. Students will work on more advanced skills, explore piano accompaniment, basics of composition, and music theory. Students can expect to gain a deeper understanding of piano and will gain the skills necessary to play in larger ensembles. Prerequisite: Successful completion of piano class or approval from content coordinator.

## Music Theory I

## Grades 9-12

605114
The purpose of this class is to introduce students to the inner workings of music. Students will learn how to compose their own music, analyze existing music, and understand music on a deeper level. This course is recommended for students who are interested in pursuing music or performance in the future. This class requires no previous experience.

## PERFORMING ENSEMBLES

The following performing ensembles are offered as courses during the school day at Somerset Berkley Regional High School. Some rehearsals and most performances for these ensembles take place outside of the school. These organizations include performances at some or all of the following: Musictown Festival Concerts and Events, Vespers Concert, Spring Concerts, and Music Festival Competitions. Music of various styles is studied to enrich the lives of these student musicians through cooperative individual participation. All these ensembles encourage the intellectual, musical and social development of the individual through the performance of high-quality music in an ensemble setting.

## Concert Band

Grades 9-12
600927
The concert band is open to all woodwind, brass and percussion students, grades $9-12$, who have had at least 2 years of experience playing their instrument. Special consideration will be given for people with limited experience at the director's discretion. Private lessons are strongly encouraged, but not mandatory. Students entered into this class are also given the opportunity to audition for the SEMMEA (Southeastern Massachusetts Music Educators Association) junior and senior music festivals.

## Advanced Concert Band <br> Grades 9-12

600928
H
Honors Concert Band is open to band students who demonstrate a mastery of musical skills. As part of this course, students will be expected to particpate in solo or chamber work, and are strongly encouraged to audition for SEMMEA Sr. District and MMEA Allstate music festivals. Prerequisite: Successful completion of concert band, select musical ensembles in middle school, or content coordinator approval.

## Orchestra

## Grades 9-12

600727
This ensemble is open to all string players in grades $9-12$, who have had at least 2 years of experience playing the violin, viola, cello or bass. Special consideration will be given for people with limited experience at the director's discretion. Private lessons are strongly encouraged, but not mandatory. Students entered into this class are also given the opportunity to audition for the SEMMEA (Southeastern Massachusetts Music Educators Association) junior and senior music festivals.

## Advanced Orchestra Grades 9-12

H
Honors Orchestra is open to string students who demonstrate a mastery of musical skills. As part of this course, students will be expected to participate in solo or chamber work, and are strongly encouraged to audition for SEMMEA Sr. District and MMEA Allstate music festivals. Prerequisite: Successful completion of orchestra, select musical ensembles in middle school, or content coordinator approval.

## Concert Choir

Grades 9-12
600527
Membership in this vocal ensemble is open to all students in grades 9-12. The course focuses on choral singing in all forms. Students will learn about proper vocal technique, the rich history of choral music, and will perform various times throughout the year. Students entered into this class are also given the opportunity to audition for the SEMMEA (Southeastern Massachusetts Music Educators Association) junior and senior music festivals.

## Advanced Concert Choir

## Grades 9-12

H
Honors Concert Choir is open to choral students who demonstrate a mastery of musical skills. As part of this course, students will be expected to participate in solo or chamber work, and are strongly encouraged to audition for SEMMEA Sr. District and MMEA Allstate music festivals. Prerequisite: Successful completion of concert choir, select musical ensembles in middle school, or content coordinator approval.

## WELLNESS

All students are required to take the corresponding Health and Physical Education classes in order to graduate.

## COURSE OFFERINGS:

## Health I <br> Semester Course

## Grade 9

Health $I$ is a required course for all 9th grade students. The major objective is to prepare all students to become informed, responsible members of society, especially in terms of their health choices. Units covered include social/emotional health and personal health and safety. Topics discussed include but are not limited to; bullying, depression, stress management, substance abuse and reproductive health.

## Health II

## Semester Course

## Grade 10

260110
Health II is a required course for all 10th grade students. The major objective is to help prepare students to become informed, responsible adults regarding their health, behaviors and choices. Units of study include social and emotional health, personal safety, reproductive health and substance abuse prevention.

## Physical Education Semester Course Grade 9

168001
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 of physical education is to improve physical fitness through a variety of activities as well as understand the importance of social skills and sportsmanship in a physical setting. Freshmen will begin their wellness path by being introduced to CPR/AED training, team building and cooperative games, fitness, low impact sports and team sports. A complete change of clothing (proper gym attire) is required for all classes. Students should bring a lock to class to lock up their belongings. Clothes will be taken home at the end of each class.

## Physical Education Semester Course

## Grade 10

268001
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. Students should bring a lock to class to lock up their belongings. Clothes will be taken home at the end of each class.

## PHYSICAL EDUCATION ELECTIVES

During both your junior year and senior, you will take one (1) semester course of Physical Education. This is a graduation requirement. During your junior year you are required to take this course in conjunction with the Civics semester course.

## Team Sports <br> Semester Course

Grades 11, 12
468001
This elective is designed for those interested in team athletic activities. The course will introduce students to the basic skills, strategies and formations needed to play a variety of team sports. Skills will be developed through drills and game situations. Rules, terminology, and safety precautions will be presented. Cooperation and the elements of effective teamwork will be stressed in class. Sports include the following: flag football, soccer, basketball, floor hockey, volleyball, team handball, lacrosse, wiffle ball, kickball and blooper ball.

## Recreational Games \& Fitness Walking Semester Course <br> Grades 11, 12

468004
This elective is a great opportunity for students to participate in individual fitness activities that can be continued throughout one's lifetime. Students will learn how fitness walking will benefit them in other activities as well as how to improve their overall well-being and fitness level throughout their life. Students will be expected to walk $1.5-2$ miles per class period during the Fitness Walking units. The elective is also designed to focus on recreational and lifetime activities. Students will learn skills, rules and strategies while participating in individual and group activities. Activities may include the following: badminton, tennis, bocce ball, koob, spike ball, ladder golf, disc golf, and ultimate Frisbee. Games are designed to teach sportsmanship, cooperation, leadership, problem solving, and proper game etiquette.

## Fitness Training

Semester Course
Grades 11, 12
468005
This elective is designed to educate students on the benefits of overall wellness and physical activity addressing the five components of fitness. Areas of focus will include the following: cardiovascular fitness, muscular strength and endurance, flexibility and body composition. The activities taught in this course will help students enhance their fitness levels and give them a better understanding of overall fitness. Throughout this course students will learn how to exercise with proper form techniques and chart their progress. Activities may include: circuit training, strength training, aerobic training, cardiovascular training, stability ball training, medicine ball training, and group fitness activities. Classes will be devoted to safety, proper techniques, and the components of a workout.

## Yoga <br> Semester Course

Grades 11, 12
468006
This elective is designed to explore the mind/body connection through the practice of yoga postures, breathing techniques, mindfulness, meditation, and relaxation. This course is designed to promote self-awareness, self-esteem and emphasize different techniques to increase range of motion, flexibility, strength, endurance, coordination, and balance.

## Stress Management Semester Course Grades 11, 12

This elective is designed to provide opportunities for students to learn and practice effective stress management techniques by recognizing their stress triggers, being exposed to and exploring specific stress management techniques that work for them and developing goals for reducing stress in their lives. Students will be given opportunities to self- reflect, set goals, practice implementation of various coping strategies and connect the importance of stress management to their current and future health. In addition to learning about this important life skill, students will explore careers that help people manage life stressors. There is a physical education component to this class which satisfies the physical education requirement.

## HEALTH ELECTIVE

## Life and Relationships

Grades 11, 12
320210
This elective course is designed to help students gain a deeper understanding of the development of relationships and responsibilities one faces throughout their lifetime. Students will be given opportunities to discuss the nature of relationships, the natural progression to marriage and the decisions and implications of starting a family. In addition, students will be introduced to the sequences of human development. Topics covered include healthy and unhealthy relationships, communication, cohabitation, marriage and divorce, pregnancy and birth, parenting, and child and adolescent development.


[^0]:    * Articulation agreements with Bristol Community College are being reviewed and may offer students credit for courses taken at Somerset Berkley Regional High School.

