

2021-22
BHS Program of Studies
Proposed Changes
Executive Summary

February 23, 2021

Blue text: New/additions

Red text: Removed

*Grammar, punctuation, and stylistic changes highlighted in document for all content areas

COMPUTER SCIENCE		
Page(s)	Proposed Change	Rationale
23	Remove existing Computer Science and Programming courses and streamline them into rebranded Computer Science courses	Some of the curriculum overlaps between Intro to Programming and Intro to Computer Science courses; change will allow for more individualized courses and a more sequential progression for students to further their understanding of Computer Science
	<div><div>INTRODUCTION TO COMPUTER SCIENCE</div><div>Heterogeneous—</div><div>Course #2620</div><div>Prerequisite: None</div><div>This course is an introduction to computer science. Students learn about computer hardware, network behaviors and components, and the Internet, using HTML and CSS to develop web pages. They are introduced to visual programming languages like Scratch to create animated simulations and design games. The course introduces students to topics such as variables, conditionals, loops, and arrays using text-based programming languages such as Python, while building internet and mobile applications. In addition, students are exposed to an overview of computing and its influence on modern society.</div></div>	
	<div><div>INTRODUCTION TO PROGRAMMING</div><div>Heterogeneous</div><div>Course #2610</div><div>Prerequisite: None</div><div>This course is a general introduction to programming. The course covers basic syntax for terminal I/O, conditionals, loops, arrays, searching and sorting using C. Students learn to write, compile, debug, and run C programs in a Windows PC environment. The course also introduces binary, octal and hexadecimal number systems.</div></div>	
	<div><div>COMPUTER SCIENCE DISCOVERIES</div><div>Heterogeneous</div><div>Course #</div><div>Prerequisites: None</div><div>CS Discoveries is an introductory course designed for 9-10th grade students new to computer science and is based on the Code.org program. Mapped to CSTA standards, the course takes a wide lens on computer science by covering topics such as problem solving, programming, physical computing, user-centered design, and data, while inspiring students as they build their own websites, apps, games, and physical computing devices.</div></div>	
	<div><div>AP COMPUTER SCIENCE PRINCIPLES</div><div>High Honors</div><div>Course #</div><div>Prerequisite: None</div><div>AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. It is important to note that the AP Computer Science Principles course does not have a designated programming language. Students will explore various languages within the programs.</div></div>	

GENERAL		
Page(s)	Proposed Change	Rationale
26-28, 35, 54, 57-59	Listed all courses offered within sub-separate program	Courses were not previously listed
	INTEGRATED MATH I College Prep Course #7723 Prerequisite: Teacher recommendation only This course will solidify and extend 8th grade math standards in addition to learning inequalities, creating and solving and modelling linear and exponential functions, using function notation, and solving systems of equations. Geometry standards will include transformations and coordinate Geometry. Introductory statistics will include interpreting and summarizing one and two-variable data involving categorical or quantitative variables. Course content is focused on Massachusetts Curriculum Frameworks related to Algebra, Geometry and Statistics. Enrollment in this course is only with permission from an administrator or as dictated by an individualized plan.	
	INTEGRATED MATH II College Prep Course #7724 Prerequisite: Teacher recommendation only Students will interpret linear functions, work with radicals and properties of exponents, and focus on quadratic functions. Geometry concepts will include volume, similarity, the pythagorean theorem and special right triangles, circles, and probability. Course content is focused on Massachusetts Curriculum Frameworks related to Algebra, Geometry and Statistics. Enrollment in this course is only with permission from an administrator or as dictated by an individualized plan.	
	INTEGRATED MATH III College Prep Course #7725 Prerequisite: Teacher recommendation only Students will focus on modelling polynomial, exponential, logarithmic and trigonometric functions. Students will extend their understanding of probability and statistics to draw inferences and conclusions from sets of data. Course content is focused on Massachusetts Curriculum Frameworks related to Algebra, Geometry and Statistics. Enrollment in this course is only with permission from an administrator or as dictated by an individualized plan.	
	INTEGRATED MATH IV College Prep Course #7726 Prerequisite: Teacher recommendation only Students will manipulate more advanced algebraic equations and expressions, solve equations and inequalities, and work with sequences and series. Students will develop an understanding of the unit circle and triangle trigonometry and solve trig equations and identities. Statistics and Probability will be explored more deeply. Course content is focused on Massachusetts Curriculum Frameworks related to Algebra, Geometry and Statistics. Enrollment in this course is only with permission from an administrator or as dictated by an individualized plan.	
	LAB SCIENCE I Heterogeneous Course: 7731 LAB SCIENCE II Heterogeneous Course: 7732 LAB SCIENCE III Heterogeneous Course: 7733 LAB SCIENCE IV Heterogeneous Course: 7734 Prerequisite: School and Counseling Approval The Lab Science course is designed to reflect the development of the Science and Engineering practices through the Science, Technology, and Engineering frameworks of Massachusetts. Each section is customized to meet the needs of the individual student to continue the development of their knowledge and application of science concepts. Enrollment in this course is only with permission from an administrator or as dictated by an individualized plan.	
	TOPICS IN UNITED STATES HISTORY College Prep Course #****	

	<p>Concepts are introduced using a balance of abstract and concrete approaches. The sources are typically at grade level. Students are expected to be able to engage in both independent and collaborative work. Teachers provide instruction and scaffolding regarding study skills, organizational skills and learning strategies to help students become independent learners. Enrollment in this course is only with permission from an administrator or as dictated by an individualized plan.</p> <p>TOPICS IN MODERN WORLD HISTORY College Prep Course #****</p> <p>Concepts are introduced using a balance of abstract and concrete approaches. The sources are typically at grade level. Students are expected to be able to engage in both independent and collaborative work. Teachers provide instruction and scaffolding regarding study skills, organizational skills and learning strategies to help students become independent learners. Enrollment in this course is only with permission from an administrator or as dictated by an individualized plan.</p> <p>ISSUES IN MODERN WORLD HISTORY College Prep Course #****</p> <p>Concepts are introduced using a balance of abstract and concrete approaches. The sources are typically at grade level. Students are expected to be able to engage in both independent and collaborative work. Teachers provide instruction and scaffolding regarding study skills, organizational skills and learning strategies to help students become independent learners. Enrollment in this course is only with permission from an administrator or as dictated by an individualized plan.</p> <p>ISSUES IN UNITED STATES HISTORY College Prep Course #****</p> <p>The sources are typically at grade level. Students are expected to be able to engage in both independent and collaborative work. Teachers provide instruction and scaffolding regarding study skills, organizational skills and learning strategies to help students become independent learners. Enrollment in this course is only with permission from an administrator or as dictated by an individualized plan.</p>	
72	Listed Learning Center as a course offering	Course was not previously listed
	<p>LEARNING CENTER Pass / Fail 2.5 / 5 Credits</p> <p>Prerequisite: Administrative Approval or as determined by individualized plan</p> <p>Learning Center is an individualized support class designed to meet students’ individual academic needs. Skills instruction can include, but is not limited to, organization and study skills, written expression skills, reading comprehension skills and math problem solving.</p>	
GUIDANCE & COUNSELING		
<i>Page(s)</i>	<i>Proposed Change</i>	<i>Rationale</i>
6	Reflect previously approved GPA changes within Program of Studies	Accurately reflect current practice
	<p>*For the classes of 2022 and 2023, the GPA will include term 1 and term 2 of the student’s senior year in the GPA calculation. The GPA will be calculated after both term 1 and, again, after term 2. This practice will be revisited in three years to determine whether it will continue.</p>	
MATH		
<i>Page(s)</i>	<i>Proposed Change</i>	<i>Rationale</i>

34, 36	New course: Foundations of Geometry	Replace Math Applications that would be removed from the Program of Studies; provide more sequential math support for students from previously replaced STEM course
	FOUNDATIONS OF GEOMETRY College Prep Course # Placement by 9th Grade Teacher Recommendation only. This course is the second part of a two-year sequence focused on extending and deepening understanding of Algebra concepts from 9th grade while also focusing on Geometry and Statistics. The content of this course includes the study of Geometry fundamentals, transformations, congruence, similarity, special triangles, circles, volume, coordinate Geometry and essential Statistics standards.	
PERFORMING ARTS		
Page(s)	Proposed Change	Rationale
46-47	Split Orchestra course and add two new courses: Beginning Orchestra and Chamber Orchestra	Expand orchestral offerings and allow for greater differentiation between students with prior musical experience and those who are becoming introduced into the field
	BEGINNING ORCHESTRA College Prep Course ? This course will be for students who do NOT already play a string instrument and would like to start at the high school level, OR students who already play a string instrument but would like to explore a different string instrument. Students will learn from a method/lesson book in a mixed ensemble setting to build skills and have performance opportunities throughout the school year. Grading will be based on completion of lesson book units and classwork. Students may use an instrument that they already own, or choose to rent a brand-new instrument. In some cases, the school may own an instrument that a student may borrow while enrolled in the course. Students who advance quickly in their studies may be invited to perform with the BHS Orchestra.	
	CONCERT ORCHESTRA Honors Course #8114 Prerequisite: Approval of Instructor to determine appropriate level The orchestra is an n-advanced performance-based ensemble that performs music from a wide variety of musical styles and time periods. This course is open to any students who play an orchestral string instrument (violin, viola, cello, bass, harp, or piano). Two sections of the course will be offered and students will be allowed to enroll in 1 or 2 sections. Skills necessary for ensemble performance will be stressed, which include the development of technical ability, tone production and sight-reading. At home practice is expected. It is strongly recommended that students in this ensemble take private lessons. Participation in all concerts or performances is mandatory. Prior to each concert there will be a mandatory, evening rehearsal. Grades will be based upon rehearsal participation and behavior, concert and dress rehearsal attendance, and recording assignments. No more than two pianists per section will be accepted. If needed, auditions will be held to fill the accompanist slots.	
	CHAMBER ORCHESTRA Honors Course ? Prerequisite: By audition only. To audition one must be a current member of Concert Choir, Band, or Orchestra. Exceptions will be considered through recommendation of a music teacher. Chamber Orchestra is an advanced performance-based ensemble that performs a sizable repertoire of high-caliber orchestral literature from a wide variety of musical styles and time periods, with a focus on Baroque and Classical Chamber Music. String students will be chosen based upon assessments of musical independence, and advanced technique skills (phrasing, vibrato, shifting, and musicality). Evidence of maturity and cooperative learning abilities as demonstrated in participation in other BHS performance ensembles is also necessary. Instruction and practice in independent group orchestral skills, and music theory will be given. String students should be able to learn music quickly through a required home practice regimen. It is strongly recommended	

	that students in this ensemble take private lessons. Participation in all concerts or or outside performances is mandatory. Prior to each concert there will be a mandatory, evening rehearsal. Grades will be based upon rehearsal participation and behavior, concert and dress rehearsal attendance, and recording assignments.	
WELLNESS		
Page(s)	Proposed Change	Rationale
62	Revise course name & description for Health	More accurately reflect the curriculum for the class
<div>HEALTH-AND-FITNESS<div>Course #9150</div><div><div>During this course, students will apply and build on the skills and concepts learned in Health I. The students will utilize communication, decision making, goal setting and self-advocacy skills. The content through which the skills will be used include: healthy vs. unhealthy relationships, alcohol, drugs, distracted driving, growth and development, pregnancy, sexually transmitted infections, and contraception.</div><div>This course will establish a foundation of skill-based health. The first half of the year will include: factual information on nutrition, mental health, stress and stress management techniques in addition to topics on communication, refusal, assertiveness/self-advocacy, decision making goal setting and internet safety and responsibility. The second half of the year will include: healthy vs. unhealthy relationships, alcohol, drugs, distracted driving, growth and development, pregnancy, sexually transmitted infections, and contraception.</div></div></div>		
WORLD LANGUAGE		
Page(s)	Proposed Change	Rationale
70	New course: Spanish for Native/Heritage Learners II	Allow for students to advance their understanding with an optional second-year to the course for those who are interested or demonstrate proficiency
<div>SPANISH FOR NATIVE/HERITAGE LEARNERS I<div>Honors</div><div>Course #4384</div><div><div>Prerequisites: Teacher recommendation and Program Director Approval</div><div>Conducted in an immersion style, this course is designed to meet the needs of students who speak Spanish at home or elsewhere and therefore would not benefit from a traditional world language course. Students will improve their reading and writing skills and will enhance their listening and speaking skills. Students will strengthen grammar, vocabulary, and cultural knowledge as they explore literature, history, art and current events. The curriculum will also include exposure to Advanced Placement historical and cultural materials as part of the students' preparation for completion of the ACTFL Assessment of Performance toward Proficiency in Languages (AAPPL), a measure used to determine eligibility for the Massachusetts Seal of Biliteracy. Students enrolled in this course will take on increased responsibility for using their class time productively and independently.</div></div></div> <div>SPANISH FOR NATIVE/HERITAGE LEARNERS II<div>Honors</div><div>Course #4394</div><div><div>Prerequisites: Teacher recommendation and Program Director Approval</div><div>Conducted in an immersion style, these courses are designed to meet the unique needs of students who speak Spanish at home or elsewhere and therefore would not benefit from a traditional world language course. These courses build upon existing Spanish linguistic and cultural knowledge and experiences of Spanish heritage speakers. This sequence of courses addresses linguistic and cultural variations within the Spanish-speaking world and aims to support students in improving reading comprehension, reviews grammar terms, and practices translation. Through their coursework, students will develop accuracy and appropriate register for professional situations and improve oral communication and writing skills, with strong emphasis in vocabulary enrichment and spelling. Students may complete one or both courses in this sequence based on their proficiency level, interest and year of graduation.</div></div></div>		