

TO: Dr. James Franchini, Mrs. Lawrence, and Mr. Ouimet and Board of Education Members
FROM: Ms. Michelle Tsao
SUBJECT: New Courses Proposed at APHS for 2018-19 School Year
DATE: January 18, 2018

The following new courses were proposed for the 2018-19 school year. Please review each course for recommended approval. Thank you.

Art: Portfolio Preparation - Full Year Course; Elective, expanded graduation pathway

Description: Portfolio Prep is a course that emulates rigor and coursework of AP Studio without the demands of the College Board submission process in May. It allows motivated art students who may not have enough inventory going into the curriculum to prepare a portfolio for the AP Studio Curriculum or a portfolio to submit for their college applications.

English: Writing Center I & II - Semester Courses; Elective

Description: Writing Center I will introduce students to the concept and philosophy of a writing center, and eventually allow students to come up with a unique philosophy for the new APHS Writing Center based on their study and research. Students who successfully complete this course will have the opportunity to become writing tutors/consultants in the APHS Writing Center. Students will study the basic features of effective writing (audience, thesis, organization, focus, development of ideas, style) and analyze how model authors write effectively. Additionally, students will practice various modes of writing themselves (personal, persuasive, research, fiction, etc.), and work with their peers to address various features of effective (and ineffective) writing in one another's writing. Students will learn how to give (and take) thoughtful, constructive feedback on writing. While this course provides training for prospective

Description: Writing Center II will allow students to put to use the skills that they learned in Writing Center I by tutoring peers in the APHS Writing Center. The class will run as an independent study, and is comprised of three major components: *Tutoring in the APHS Writing Center *Creating and carry out outreach programs to faculty and students to generate awareness of and interest in the Writing Center *Completing research projects on topics such as, but not limited to: Writing Center stats, studies of other successful writing centers at similar levels, reaching ELL through the writing center, motivating reluctant writers, strategies for students with learning disabilities, etc. writing tutors, it is open to anyone who seeks to become a better writer.

Math - Exploring Computer Programming Full Year Course, Elective

Description: There is no question that technology is changing our world and the advances are not going to slow down. Computer programs are used in almost every career, and many aspects of everyday life, but who created these programs? This course explores the impact computers have had on society and gives students experience programming with the purpose of improving everyday life. The course introduces coding using a block based language and lays the foundation for achieving advanced programming skills. Through the lens of mathematical computing and logical reasoning, students will create webpages, develop apps, and solve physical problems. Programming concepts to be covered include but are not limited to: variables, decision statements, loops, functions, parameters, arrays, and recursive algorithms.

Math - Introduction to Computer Science Full Year, Elective, Siena credit

Description: Through this introduction to computer science and computer programming, students will be exposed to the inner workings of the technology they so often use. In this course, students will showcase their creativity through creating and problem solving while being introduced to important fundamental topics of computer science. Using Python Multimedia Programming the course examines abstraction, computer organization, representation of information, history of computing, ethics, and the development and evaluation of algorithmic solutions.

Music: Comprehensive Foundations in Music - Full Year; Elective, expanded graduation pathway

Description: This course is for students with an interest in writing music and learning basic instrumental skills (piano and guitar) that are not based in ensemble performance. Students will be able to explore composition in basic song from using basic Music Theory elements. The class will consist of the following: -Basic Music Theory -Basic Piano Skills -Basic Guitar Skills -Personal composition unit Students will be able to exhibit proficiency by writing and performing their own music for the class.

Science: Applied Physics - Full Year Course; Elective

Description: Applied physics in an introductory course in physics. Curriculum includes 1D & 2D motion, work, energy & power, momentum, electricity & magnetism, and modern physics. We complete many lab activities including studying motion, projectiles, catapults, frictional force, mechanical advantage, and electrical circuits & resistance. Completion of a chemistry course would be helpful to understanding the introductory concepts encounter in the class. Calculations include basic algebra, using the quadratic formula and the sin, cos and tan functions. The class meets every other day for a block and cumulates in a final project.

Science: The Human Brain - Semester Course; Elective

Description: This laboratory brain science course will address the fundamentals of neuroscience by stressing brain structure and function. Following the basics of neuroscience, students will choose 10 topics to investigate deeper. The 'choice' topics include sleep, neurodegeneration, neuroscience of art and music, language, love, emotion, happiness, exercise, psychopathology, CTE, intelligence, among others. Laboratory activities investigate synapse function, neuroanatomy (brain dissection), action potential, brain waves, optics, sensory systems, and neuron impulse. This is a user friendly, lab based class designed for anyone with a desire to learn more about how the brain works. Students taking this class will learn to improve and optimize their brain's potential.

Technology: PLTW, Computer Science Principles; Elective

Description: Computer Science Principles (CSP) is a PLTW course where students work in teams to develop computational thinking and solve problems. The course does not aim to teach mastery of a single programming language but aims instead to develop computational thinking, to generate excitement about the field of computing, and to introduce computational tools that foster creativity. The course also aims to build students' awareness of the tremendous demand for computer specialists and for professionals in all fields who have computational skills. Each unit focuses on one or more computationally intensive career paths. Students practice problem solving with structured activities and progress to open-ended projects and problems that required them to develop planning, documentation, communication and other professional skills. Problems aim for ground-level entry with no ceiling so that all students can successfully engage the problems. Students with greater motivation, ability, or background knowledge will be challenged to work further.

Theatre Arts: American Musical Theatre I & II - Full Year; Elective, expanded graduation pathway

Description: This course is a comprehensive study of American musical theatre through the lens of renowned composers and lyricists. Students are exposed to a variety of musical theatre styles through composers, lyricists, performers that have shaped this popular genre. For the first half of each unit, students focus on musical theatre from an historical viewpoint while performing individually, with partners and in an ensemble setting to expand their grasp on character creation, text and subtext, stage presence and song interpretation. The second half of the unit culminates in a cabaret-style performance where students showcase their development as singing actors. The final project is a cabaret style revue presentation for an in class assessment with the potential for outreach performances in the district.

Notes: This is a 2-year sequence course with American Musical Theatre 1 being offered 2018-2019 and American Musical Theatre 2 being offered 2019-2020

Theatre Arts: Comedy and Improv - Full Year Course; Elective, expanded graduation pathway

Description: This performance based repertory class emphasizes the basic skills of comedy and improvisation: listening, clarity, confidence and performing instinctively and spontaneously. Students will experience performing improvisational scenes and sketches individually, in pairs and as part of an ensemble for a small audience each semester.

World Languages: Social Justice in Latin America - Semester Course, Elective

Description: This course will explore social, political and historical events in Latin America and the Caribbean from Pre-Colombian through modern times using film, art and music to gain knowledge of the cultures and analyze societal reaction and participation in these events. the focus will be on countries conquered and colonized by the Spanish. The course will explore, including but not limited to, cultures, races, ethnicity, nationalities and religions.

