

Shrewsbury High School
64 Holden Street
Shrewsbury, Massachusetts 01545
Office of the Principal



Memorandum

To: Dr. Joseph Sawyer
From: Todd Bazydlo
Date: December 27, 2019
Re: Proposed Changes to the 2020-2021 HS Program of Studies

I am pleased to present proposed changes and additions to the *Program of Studies* for the 2020-21 school year. The majority of the changes presented within this document are in response to the growing demands of our diverse school population and aligns with current educational research. I look forward to providing the School Committee more detail regarding the revisions listed below at the January meeting.

Thank you for your consideration and support.

Family and Consumer Sciences Department

1. *Foods of the World* will be offered during the 2020-2021 school year; *Mediterranean Cuisine* will not be offered during the 2019-2020 school year.
2. Add a new course: *Baking and Pastry Arts*

In this course, students learn the fundamentals and the science involved in the making of quick bread, yeast bread, pastries, cakes, and cookies. Students learn the lost art of baking from scratch which is great on a budget and limits preservatives and additives. Emphasis on equipment, the function of ingredients, avoiding convenience products when possible, the importance of accurate measurements and baking terminology gives students the skills to ensure their success in the kitchen. The knowledge of ingredients and how those ingredients react when combined is an integral part of baking. This growing knowledge will be used throughout each lab. Teamwork, communication, organization, and conservation skills are integrated into the class as students read and follow directions, work together to complete each task, and make healthy substitutions whenever available. This course is aligned with National FACS Standards and follows a project/performance-based curriculum.

Baking and Pastry Arts will be offered during the 2020-2021 school year; *Culinary Methods for Nutritious Foods* will not be offered during the 2020-2021 school year.

Foreign Language

1. Add a new course: *AP Mandarin Chinese*

This course is designed for those students who have attained a high degree of proficiency in Mandarin Chinese and who are interested in completing studies comparable in content and difficulty to a full-year college-level course. The goal of the course is to prepare

students for the Mandarin Chinese AP Language examination by emphasizing the basic objectives of proficiency in listening, speaking, reading, and writing. All forms of writing are emphasized, especially the directed and the open-ended question. Weekly journals and critical writing pieces are included. Students hone listening and speaking skills through repeated practice in the form of dialogues, skits, interviews, and directed questions. Picture sequences are also used to practice for the exam, and grammar is reviewed, fine-tuned and applied in authentic communicative situations. Students are expected to take the Advanced Placement Exam in May. This class is conducted entirely in Mandarin Chinese.

2. Add a new course: *Accelerated French I*

The goal of this course is to prepare students for the high school French program. Students will hone their skills in reading, writing, speaking, and listening. This course emphasizes the key grammar concepts and vocabulary necessary to advance to *French II*.

Instructional Technology and Media Services (ITAMS)

1. Change the name of the *Intro to Computer Programming with JAVA* to *Computer Programming with JAVA*.

Mathematics

1. Add an honors level course: *Advanced Quantitative Reasoning Honors*

This course will be an option for advanced seniors who are interested in exploring how to analyze, think critically about and reason with data. There are a lot of careers that students will study in college that require them to manage and make interpretations about data. This course will support advanced students who want to use data to make models, interpretations and predictions for problems that are relevant in a wide variety of applications.

2. Eliminate a course: *Algebra & Geometry II/Advanced Math I Honors*.

This course was implemented in the 2019-2020 school year. During the first year of the offering, there were several students misidentified for the course, which caused unnecessary stress on students and their transcripts. This course was designed for students who are exceptionally advanced in their mathematical content knowledge and thinking. During the previous two years we were able to meet the needs of these students by offering an opportunity to co-study *Algebra & Geometry II* and *Advanced Math I Honors*. Through ALEKS and an after-school support program during the 2nd semester of their freshman year, approximately 3-4% of the freshman class were able to successfully complete the co-study. We have decided to return to the co-study option because it has been difficult for the Grade 8 teachers to identify the cohort of students who would be successful with the combined course. Students are better supported with the co-study option as they have the first semester to demonstrate their ability to be successful as they meet the benchmarks set forth by the co-study program.

3. Eliminate a course: *Advanced Math II Topics*

This course was originally designed in collaboration with Quinsigamond Community College(QCC), in order to help seniors who struggle with Math prepare for college

placement tests, to support them to qualify for credit-bearing math courses. During the four years we have offered this course, the standards assessed by the Accuplacer test have changed to better align with SAT content standards. QCC decided not to support the change, therefore the curriculum created by QCC to prepare for their placement test, does not necessarily support students who choose not to go to QCC. We feel most of our seniors who struggle with math will be better supported by our *Functions & Trig* course, whose curriculum better aligns with the current state and Accuplacer standards defined for college and career readiness as well as the rest of our high school program.

Performing Arts

1. Add a new course: *Foundations of Music* (Semester course)
This is an elective course for 11th or 12th-grade students who have an interest in pursuing careers in education or human services. This course may be taken to meet, in part, a student's music elective requirement or as an additional elective course. Students under the direction of the teaching staff, serve as peer partners in an inclusive music education setting. All students will have the opportunity to research, prepare and explore educational, music-based lessons, fostering creativity, communication, collaboration and critical thinking in a diverse setting. Previous musical skill is not a requirement. The course meets 2 days during the 7-day rotation
2. Change the title of *History of American Music* to *History of Rock and Roll*
3. Due to current staffing, the following courses will not be offered:
Stage Combat, Movement for Theater, Directing/Playwriting, Foundations of Dance, Musical Theater Dance, Jazz Dance 1, and iPad Ensemble.

Science & Engineering

1. Add new course: *Advanced Placement Physics C (Mechanics)*
Prerequisite: Intro Physics or Hon. Intro Physics or Honors Physics. Co-requisite: Enrollment in Honors Calculus or higher.
This course in mechanics is a calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in one of the physical sciences or engineering. Students cultivate their understanding of physics through classroom study and activities as well as hands-on laboratory work as they explore concepts like change, force interactions, fields, and conservation. Topics include: kinematics, Newton's laws, work, energy, power, systems of particles and linear momentum, rotation, oscillations, and gravitation. Students are expected to take the AP Physics C - Mechanics version of the Advanced Placement Exam in May. This course is considered a Lab science.

This course provides students with an option to take an AP Calculus-based physics course. Our current AP physics course (AP physics 1) provides a strong AP-level physics background for some students, but it is an algebra-based course, which is often not recognized by colleges for students entering the fields of engineering and physics. This new course provides students wishing to pursue physics or engineering in college with a stronger background and preparation compared to AP Physics 1. We will continue to offer AP Physics 1.

2. Add a new course: *Human Body Systems*

Prerequisite: *Biology*

In this *Project Lead The Way* course, students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through real-world cases, and act as biomedical professionals to solve medical mysteries. This course will be available to 10-12th grade students at the A level.

NOTE: This is the 2nd of 3 courses that will need to be introduced as a result of receiving a \$50,000 grant related to implementing a PLTW Biomedical pathway.

3. Eliminate DE (Project Lead the Way - Digital Electronics)

This course has been included in the program of students for a number of years, but being a 3rd PLTW Engineering option for students, it typically sees only 8-12 requests per year. Because the course has not run in a few years due to the dynamics of scheduling and staffing needs, eliminating this course from the POS will reduce counselor work-load as they will no longer need to re-configure schedules for the students who do not get the course in their schedule.

Social Sciences

1. Eliminate course *America in the World Today* as this course has historically been under-enrolled and overlaps with our *American Government* course and the *Global Studies* course.
2. Minor language change: *Psychology* and *Sociology* electives will be offered to students in grades 11-12.

Visual Arts

1. Add a new course: *Foundations of Art* (Semester course)
This course would be open to students in grades 11 and 12 as an elective and would meet two times per cycle opposite of *Foundations of Music*. This course is designed for juniors and seniors interested in pursuing careers in education or human services. Students under the direction of the teacher will serve as peer partners in an inclusive setting. Students will research and prepare educational, art-based lesson plans based on the physical, developmental, and emotional needs of pre-vocational students.