Geneva High School

Memorandum

To: **Board of Education**

From: **Tom Rogers and Doug Drexler**

Date: **October 17th, 2016**

Re: **GHS New and Modified Courses for 2017-2018**

Cc: **Dr. Mutchler, Dr. Barrett, Mrs. Sims**

Although it seems as if the current school year is just getting underway, we have already been hard at work planning for the 2017-2018 school year. We are recommending three new courses as well as modifications to seven existing courses. These changes to our course offerings will better enable us to meet the evolving needs of our students.

To date, these new and modified courses have been reviewed and approved by the GHS Department Chairs, Building Leadership Team, Building Administration, the Staff and Curriculum Development Council, and the District Department of Learning and Teaching. We await your approval before allowing students to register for these courses beginning in late November.

Some of these recommendations do not require a change in staffing, space, or budget, while others will require those changes if they produce sufficient student enrollments. Funding requests for any expenses will follow the current procedures in the spring once our course registration process is complete. However, we have included the possible anticipated staffing and material costs for informational purposes. Additional information has also been included that provides greater detail for some of these recommendations.

Please let us know if you have any questions about the proposed changes that appear in this report.

Proposed Course Additions

Department:	Course:	Description:	Anticipated Costs:
Math	AP Calculus BC	The calculus needs of our students have shifted over time, with more of them qualified to take a more advanced calculus class following completion of Pre-Calculus or Pre-Calculus Honors. This is a course we do not currently offer. Students will have the choice of either AP Calculus AB or AP Calculus BC.	$6,000 for additional texts and professional development, 0.2-0.4 FTE
Math	Computer Science A (Project Lead the Way)	After launching the first PLTW Computer Science course in 2015, there is now student demand to offer the second course in the sequence. Students in this course will utilize computational thinking and programming to develop Android Apps for mobile platforms.	Year 1 = $14,500 0.2-0.4 FTE Years 2+ = $2,500
Technology	Technology Support Internship	This one-semester opportunity will allow students to work with building technology staff to support technology needs of students and staff while developing customer service skills. Additionally, students will become certified in an area of technology use that applies to their future goals.	estimated $2,000-$4,000 annually for student training modules, 0.2 FTE

Proposed Course Modifications

Department:	Course:	Brief Summary of Proposed Change:	Anticipated Costs:
Art	Digital Photography	Eliminate prerequisite of Intro to Photography. Students will now be able to more easily access a photography course by being able to begin with the digital option instead of having to work in the darkroom.	None
Art	Intro to Photography	Change course name to Film Photography	None
Art	Advanced Photography Concepts	Alter prerequisite to include either Digital Photography or Intro to Film Photography	None
Business	Computer Software Applications	Drop keyboarding words per minute (WPM) pre requisite of 25 WPM. Although this is a useful skill, it is not necessary for students to be successful in this course.	None
Business	Entrepreneurship and Business Communications	Simplify course name to Entrepreneurship	None
Family & Consumer Science	Foods course sequence	Course name changes as follows: * Foods & Nutrition becomes Culinary Arts * Global Foods becomes International Foods * Culinary Arts I becomes Culinary Arts: Baking & Pastry * Culinary Arts II becomes Culinary Arts: Hospitality & Tourism * Restaurant Management I becomes Restaurant Entrepreneurship I * Restaurant Management II becomes Restaurant Entrepreneurship II	$1,000 for new texts for one of the courses
Social Studies	Modern World History/Honors Modern World History	Shift both courses from chronological coverage to thematic courses covering the concepts of globalization, international conflicts, nation states, revolutions, and the role of the individual. This shift is based on the C3 standards for social studies. These courses will have much more of a global focus under this new model.	None

Appendix A: AP Calculus BC

Course Name: AP Calculus BC

Open to grades: 11, 12

Credits: ½, ½

Prerequisite: Grade of A in Pre-Calculus and teacher recommendation –OR-
Grade of A or B in Pre-Calculus or teacher recommendation

AP Program Fee: c. $95

Description: AP Calculus BC includes all topics covered in AP Calculus AB as well as additional topics. The additional topics include sequences and series, polar coordinates, vector functions, additional integration methods, and differential equations. AP Calculus BC is designed to be equivalent to a first semester college calculus course and the subsequent single-variable calculus course. Students desiring two semesters of college placement/credit will be encouraged to take the Advanced Placement Exam. A graphing calculator is required.

Additional Background: The calculus needs of our students have shifted over time, with more of them qualified to take a more advanced calculus class following completion of Pre-Calculus or Pre-Calculus Honors. This is a course we do not currently offer. Students will have the choice of either AP Calculus AB or AP Calculus BC. The primary differences between AP Calculus AB and AP Calculus BC are the pace and rigor of the courses.

Appendix B: Computer Science A (Project Lead the Way)

Course Name: Computer Science A (Project Lead the Way)

Open to grades: 10, 11, 12

Credits: ½, ½

Prerequisites: Computer Science & Software Engineering (Project Lead the Way)

Course Fee: None

Description: Students taking this course will focus on further developing computational thinking skills through the medium off Android App development for mobile platforms. The course utilizes industry-standard tools such as Android Studio, Java programming language, XML, and device emulators. Students will collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and Web-based databases. Successful completion of this course, along with extra preparation, will help to prepare students to take the Advanced Placement Computer Science A Exam if they choose to do so.

Additional Background: After launching the first PLTW Computer Science course in 2015, there is now student demand to offer the second course in the sequence. For students interested in pursuing a career that involves computer science and/or computational thinking, this course will advance their knowledge and skills in this area. It is also hoped that developing the computer science course sequence will help to spark more interest in the area of computer science, which is increasingly applicable to the future job market.

Appendix C: Technology Support Internship

Course Name: Technology Support Internship

Open to grades: 10, 11, 12

Credits: ½

Prerequisites: Application

Course Fee: $30

Description: This one-semester program is designed for the student who would like to gain experience working in a real-life technology support environment and further develop their own technology and customer service skills. Students will work with the GHS technology staff to assist both students and staff in the daily operation of the Technology Helpdesk. Additionally, students will choose a technology pathway that will further develop their technology skills in specific areas of interest. As part of this program, students must be able to commit to attending periodic training sessions at various times outside the normal school day/year that may be offered. This program may be repeated with instructor approval.

Additional Background: This program closely aligns with the Geneva 304 Vision by focusing on heavily on both adaptive learning and collaboration. The development of this program coincides with the implementation of the 1:1 learning initiative at GHS. Given the growing number of devices, students involved with this program will gain valuable experience working in a technology support role similar to what they might experience in a company.