

Geneva High School

Memorandum

To: Board of Education
From: Tom Rogers
Doug Drexler
Date: October 1st, 2014
Re: GHS New and Modified Courses for 2015-2016
Cc: Dr. Mutchler, Patty O'Neil

Although it seems as if the current school year is just getting underway, we have already been hard at work planning for the 2015-2016 school year. For fall of 2015 we are recommending five new courses as well as modifications to several 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, and the District-wide Staff and Curriculum Development Council. We await your approval before allowing students to register for these courses beginning in November.

Some of these changes do not require a change in staffing, space, or budget, while others will have needs associated with them if they produce sufficient student enrollments to run them. Funding requests for any expenses will follow the current procedures for this 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 on some of these recommendations.

Please let me know if you have any questions about the proposed changes that appear below:

Proposed New Courses

Department	Course	Description	Anticipated Costs
Mathematics	Computer Science & Software Engineering (PLTW)	Add a new course in the area of Computer Science that will teach students not only how to program, but also the context of the increasing role that technology plays in our society. Additional information is available in Appendix A.	Year 1 = \$48,500 plus up to 0.2-0.4 FTE Years 2+ = \$2,500
Science	Advanced Placement Physics C	Currently, GHS only offers a second advanced course in the Life Sciences and Chemistry. The addition of AP Physics C would provide students with the opportunity to take two Physics courses (as they currently can in Biology and Chemistry). Additional information is available in Appendix B.	\$12,000 plus up to 0.2 FTE

Social Studies	Advanced Placement World History	Shift of current AP US History course to sophomore year creates need for a new upper level AP offering in the Social Studies Department. Additional information is available in both Appendix C and Appendix F.	\$7,500
Family & Consumer Science	Child Development II: Early Childhood Education	Add a second course to follow the successful Child Development I. This course would be geared towards students exploring careers in early childhood education. Additional information is available in Appendix D.	\$3,000 plus up to 0.2 FTE
Physical Education	Group Fitness	After a successful pilot of this course, we would like to make this a permanent addition to our PE course offerings. Students participate in a variety of aerobic activities such as kettle bell, Pilates, Zumba, step aerobics, yoga, kickboxing, medball, bosu ball, and free weights. Additional information is available in Appendix E.	None

Proposed Course Modifications

Department	Course	Proposed Modification	Anticipated Cost
English	English I	Modify the existing English I curriculum to include a much stronger emphasis on grammar and composition.	None
English	Newspaper I & II	Remove from Program of Study. Neither of these courses have run in several years due to extremely low enrollment. Another elective remains for students wishing to pursue journalistic writing.	None
English & Social Studies	World Studies	Remove from Program of Study. This course combines Freshman English and Freshman Social Studies into one double-period class. The class has only rarely had enough enrollment to run; additionally, with the shift in the English 1 curriculum, this course is no longer feasible.	None
Science	Honors Physics	Rename as AP Physics I. Current Honors Physics course aligns with recently refined AP Physics I curriculum. Change in course name will more accurately reflect course content.	\$3,500
Social Studies	AP European History	Remove this sophomore course from Program of Study and replace with AP US History moving to sophomore year. Additional information is available in Appendix F.	None
Social Studies	Urban History	Rename as Urban Studies to better reflect the global nature of this course that deals with issues such as the environment, politics, and economics.	None
Social Studies	US History & AP US History	Begin transitioning these courses from junior year to the more appropriate sophomore year by opening both courses up to both sophomores and juniors (currently just juniors). Additional information is available in Appendix F.	\$6,000 plus up to 0.6 FTE during 3 transition years

Business	Business Principles	Change course title to "Business and Management" to better reflect course content.	None
Business	Essential Business Skills	Change course title to "Entrepreneurship and Business Communication" to better reflect course content.	None
Business	Digital Marketing	Remove from Program of Study. This course has had minimal enrollment for several years. Additionally, the new VEI course addresses this area of need.	None
Business	Multimedia Design	Remove from Program of Study. This course has had minimal enrollment for several years. Additionally, the new VEI course addresses this area of need.	None
Technology Education	Design & Technology of Animation	Based on running this course for two years, eliminating the prerequisite for this course will broaden the appeal of this course without sacrificing the integrity of the course.	None
Technology Education	Engineering Design	Remove from Program of Study. Project Lead the Way coursework adopted in 2013-14 has replaced.	None
Technology Education	Engineering Technology	Remove from Program of Study. Project Lead the Way coursework adopted in 2013-14 has replaced.	None
Technology Education	Engineering Principles	Remove from Program of Study. Project Lead the Way coursework adopted in 2013-14 has replaced.	None

Appendix A: Information Regarding Computer Science & Software Engineering (PLTW)

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

Open to grades: 9, 10, 11, 12

Credits: ½, ½

Prerequisite: None

Description: This course aims to develop computational thinking, introduce professional tools that foster creativity and collaboration, and generate excitement about career paths that utilize computing. By incorporating multiple platforms and languages for computation, this course will help students develop programming expertise and explore the workings of the Internet. Projects and problems include app development for mobile devices, visualization of data, cybersecurity, robotics, and simulation. The course also aims to engage students to consider issues raised by the present and future societal impact of computing.

Additional Background:

There has been considerable attention given in recent years to the technological skills students will need to successfully navigate their futures. Much of this attention has focused on the ability of students to code, or program computers. As we examined different ways that we might implement computer programming at GHS, what became apparent is that many approaches might do a good job of teaching students how to program, but without much context about why they were doing it. The Computer Science and Software Engineering course being proposed is a blend of learning the “how to” along with the “why”. One of the main features of this course that we found attractive is that there is extensive context built into it. There are course components that address cybersecurity, privacy, and other issues about the role technology plays in our society. A detailed outline for this course can be found at:

[http://www.pltw.org/sites/default/vfiles/2014-15%20CSE Course Outline.pdf](http://www.pltw.org/sites/default/vfiles/2014-15%20CSE%20Course%20Outline.pdf)

There are additional Computer Science courses currently being developed by Project Lead the Way that we may want to evaluate in future years.

Appendix B: Information Regarding Advanced Placement Physics C

Course Name: Advanced Placement Physics C

Open to grades: 12

Credits: $\frac{1}{2}$, $\frac{1}{2}$

Prerequisite: Course grade of A in Physics or teacher recommendation, or
Course grade of A or B in Honors Physics/AP Physics 1 and teacher recommendation

Course grade of A in Pre-Calculus, or
Course grade of A or B in Honors Pre-Calculus

Concurrent enrollment in Calculus is highly recommended

Description: This is an advanced, capstone science course that is presented in a more rigorous and analytical manner than general physics. This calculus-based course allows students to pursue college level physics. Students may receive advanced placement credit upon entering college. The course covers topics and laboratories typically offered by colleges in the freshman year. Topics covered include: linear and circular motion in one, two, and three dimensions, forces in multiple dimensions, energy and momentum conversions/conservation, gravitation, periodic motion, and fluid mechanics. Laboratory involvement is required and will be key to student success.

Students enrolled in AP courses are expected to take the AP exam offered in May.

**Additional
Background:**

Currently, GHS offers AP coursework in Biology, Environmental Science, and Chemistry but not in Physics. The addition of this course would give students an AP option in each of the branches of science.

Appendix C: Information Regarding Advanced Placement World History

Course Name: Advanced Placement World History

Open to grades: 11, 12

Credits: ½, ½

Prerequisite: Course grade of A or B in AP US History, or
Course grade of A in US History, or
Course grade of A in American Studies

Description: This course focuses on developing students' abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance – focusing on the environment, cultures, state-building, economic systems, and social structures – provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions.

Students are expected to take the AP examination in World History in May.

Additional Background: Please refer to Appendix F regarding the overall plan in Social Studies for 2015-16.

Appendix D: Information Regarding Child Development II: Early Childhood Education

Course Name: Child Development II: Early Childhood Education

Open to grades: 10, 11, 12

Credits: ½

Prerequisite: Successful completion of Child Development I

Description: Students enrolled in this course will focus on the growth and development of preschool-aged children. Students will explore the areas of development: physical, emotional, social, and intellectual. Health and safety issues will be discussed and careers related to the child care field will be identified.

Additional

Background: Many of the students enrolled in Child Development I want to become teachers or work with children in some facet; this course will focus on providing these students with an opportunity to learn more about how preschool children grow, think, interact, and learn best. Students will take what they have learned in Child Development I and build on those skills - especially in the areas of lesson planning, unit planning and teaching young children.

Appendix E: Information Regarding Group Fitness

Course Name: Group Fitness

Open to grades: 11, 12

Credits: ½, ½

Prerequisite: None

Description: This class offers students the opportunity to participate in a variety of activities that touch on all health-related fitness components, including cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition. Class activities may include kettle bell, Pilates, Zumba, step aerobics, yoga, kickboxing, medball, bosu ball, and free weights. This class will only be offered during 10th period. Students will not be allowed to exempt for sports and/or marching band.

Additional Background: After a successful pilot of this course, we would like to make this a permanent addition to our PE course offerings. Student feedback has been universally positive, with 100% of students indicating that they felt this course was very beneficial to them.

Appendix F: Information Regarding Social Studies AP Course Plan for 2015-2016

Given the multiple components we are proposing to add, remove, or shift within the Social Studies Department, it can be understandably confusing keeping track of what is going where. This appendix provides additional details about the proposed changes. In summary, the plan is to:

Shift:	Advanced Placement US History and Standard US History to sophomore year
Remove:	Advanced Placement European History from sophomore year
Add:	Advanced Placement World History to junior/senior year

Additional information about shifting AP US History and Standard US History to sophomore year

US History and AP US History currently reside in the junior year as a historical holdover from when Driver Education was a graduation requirement in Illinois. Not surprisingly, students and parents sought to meet the Driver Education requirement when students were 15 years old (sophomore year). Because of this, the US History course was chosen as a junior level course so that space could remain open for sophomores to take Driver Education. Driver Education has not been a graduation requirement for several years now, and we have the ability to transition this course to a more appropriate curricular location within the high school careers of our students. By moving US History and AP US History to sophomore year, multiple objectives are accomplished:

- Anywhere from 100-150 students already meet their US History requirement as sophomores by taking American Studies (combination of US History and American Lit). Moving US History and AP US History to sophomore year would provide a consistent, strong foundation for all sophomores as they move into other electives as juniors and seniors (in all electives, not just in Social Studies). This would help our students to develop more of a common language as they enter their junior year.
- Given the strong reliance on Social Studies in addressing Common Core literacy and writing standards, this shift will allow for increased collaboration between the Social Studies and English departments. Our students would essentially be working with the same language and understandings in both English and Social Studies for their freshman and sophomore years.
- By providing our students with a stronger, more consistent experience during their first two years of high school, we lay the foundation for more advanced student coursework during their junior and senior years.

Additional information about removing AP European History and adding AP World History

With the high priority of having all sophomores enroll in US History, AP US History, or American Studies, AP European History no longer has a built-in audience sophomore year. As we evaluated whether to shift or replace AP European History, we came to the conclusion that what we see as ideal for juniors and seniors is different from what we see as ideal for sophomores.

All students at Geneva High School currently take a course in modern world history, laying a good foundation for a more comprehensive and more sophisticated course when interested students become juniors or seniors. The course for 9th graders is increasingly skill-based (reading and writing); content-wise, it looks at the world from 1500 to the present, and has a heavy Western civilization emphasis. It is a relatively surface level course when compared to AP World History. AP World History, conversely, has a thematic approach, considers a much broader time frame and “bigger” world. Advanced Placement World History highlights the nature of changes in international frameworks, interactions and exchanges, the causes and consequences of events, as well as comparisons among major societies. The course features themes of historical inquiry, use of key concepts, investigation of historical developments within chronological framework and geographic regions, and a strong emphasis on historic thinking skills. It is, in no way, a mere “repetition” of 9th grade world history.

Part of the mission of the Social Studies department is to produce learners who see themselves as world citizens, with responsibilities to that community. Moving students to an understanding of the contemporary world is no easy task, but we believe that this course will allow students to achieve a more holistic, systematic, and global view of history than would be possible in the more narrowly-focused AP European History. AP World History offers balanced global coverage – with Africa, the Americas, Asia, and Europe each represented.

Generalized Course Sequences for AP Social Studies Courses

Year in School	Current Course Offering	Proposed Course Offering
Freshman	Honors Modern World History	Honors Modern World History
Sophomore	AP European History	AP United States History
Junior	AP United States History	AP World History
Senior	AP United States Government	AP United States Government