



Customizing Learning,
Nurturing Potential...
Delivering Excellence

Upper St. Clair School District

Fast Track Curriculum Recommendations

2016-2017

All approved recommendations are subject to budget constraints. Administrative approval of any recommendation should not be considered as tacit approval for the related expenditures or summer workshops. Workshop could include Flex time, Act 48 hours, and/or paid workshop hours.

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UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: HSLT Level: High School
 Area: All Content Areas / Grade 12 Date: November 17, 2016

Curriculum Recommendation

1. Evaluate and redesign the 12th grade year that further supports a student-centered, student-driven, and goal oriented experience focused on college, career, and life readiness.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. Meaningful preparation for academic pursuits after high school has been a critical and lauded feature of the 12th grade year at Upper St. Clair. Historically, Upper St. Clair students have matriculated to four-year higher education settings. Over time, however, an increasing number of students are exploring opportunities in work, trade schools, and two-year degree programs.</p> <p>2. The current senior year experience provides students with some level of choice in coursework, but is fundamentally structured much like grades 9-11, with less scheduling flexibility (beyond a late start or early release) for preparatory experiences beyond those related to a four-year degree.</p> <p>3. Some of the shifts in post-graduate plans, also occurring at a national level, are attributed to economic and employment factors. As part of a response, the 339 Guidance Plan, aligned with the Pennsylvania Department of Education's Career and Education Work Standards, provides the framework for goal-setting within a variety of career pathways.</p> <p style="text-align: center;">(Cont'd.)</p>	<ol style="list-style-type: none"> 1. Administrative approval. 2. Study <i>Redefining Ready!</i>, the C3 (College, Career, and Civic) Framework, and other seminal research in the areas of college, career, and life readiness. 3. Conduct a program evaluation of the current 12th grade experience and facilitate stakeholder input sessions of four varieties (1) an ad hoc committee of faculty representatives from all disciplines; (2) a group of professionals from the community; (3) interested members of the 2015 High School Experience Comprehensive Plan Vision Team; (4) a representative group of USCHS alumni. Use the program evaluation and stakeholder input to develop a series of recommendations related to a 12th grade redesign. 4. Establish site visits to high schools that offer progressive 12th grade experiences. 5. Establish committees to develop action plans that guide (1) stakeholder group recommendations, (2) feedback from benchmarking site visits, and (3) other relevant innovative practices. In addition to action plans, develop timelines to be shared with Central Office staff and School Board members throughout spring 2017. 	<p> </p>	<p><u>Approved.</u> Preparing students to transition to college and a vastly changing work world should be the goal of the senior year. This recommendation supports the District's Strategic Plan related to the goals for reimagining the high school experience.</p> <p style="text-align: center; font-size: 24pt;">4</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: HSLT **Level:** High School
Area: All Content Areas / Grade 12 **Date:** November 17, 2016

Curriculum Recommendation

1. Evaluate and redesign the 12th grade year that further supports a student-centered, student-driven, and goal oriented experience focused on college, career, and life readiness. (Cont'd.)

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>4. More specifically, in the past several years, initiatives of the District, such as the Career Exploration Opportunities program (CEO) and the Financial Literacy course, have begun the conversation related to the value of preparing for career and life. Given the support for such programming, a next step would be to develop a college, career, life readiness framework for all USCHS students, with an emphasis on experiences and opportunities in the 12th grade year.</p> <p>5. Toward that end, such a framework should offer student-driven, goal-oriented experiences that promote preparation for college, career, and life. These opportunities may include, but are not limited to, dual enrollment, online & hybrid courses, life literacy development (e.g., financial, civic, cultural, digital), and apprenticeship, job shadowing, and internship experiences.</p>			5

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Liz Cecelia, Russ Hoburg, Colin Syme, Tom Yochum

Level: High School

Area: All Content Areas

Date: November 17, 2016

Curriculum Recommendation

2. Study the requirements, curricula, and feasibility of offering AP Seminar, AP Research, and the AP Capstone Diploma for students in grades 10-12.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. Upper St. Clair High School has a long tradition of offering rigorous courses and programs. In addition to such offerings, the school has gained national attention for academic achievement. Specifically, USCHS was recently recognized as a member of the <i>College Board AP Honor Roll</i>. This distinction is bestowed upon districts that increase both the number of AP courses offered as well as student scores on AP subject tests.</p> <p>2. To this point, all AP courses have been tied to specific departments (e.g., AP Calculus or AP English). In 2014, the College Board launched a program whereby interdisciplinary, “special topic” based courses may be offered. These courses, AP Seminar and AP Research, link closely to the High School’s goal of providing challenging coursework that is customized, encourages interdisciplinary collaboration, and prepares learners for college and career. While an exam is a component of the aforementioned courses, school-based team projects and presentations as well as individual research and presentations are also key components of the work. The skills developed through these experiences offer students authentic and rigorous academic experiences.</p> <p style="text-align: center;">(Cont’d.)</p>	<ol style="list-style-type: none"> 1. Administrative approval. 2. Convene a committee of teachers to review the requirements and curricula of the AP Seminar and AP Research courses. In addition, this committee will develop a synthesis of both student and District requirements related to the AP Capstone Diploma. 3. Visit local peer districts who have adopted the AP Capstone framework in order to understand implementation more deeply and to ascertain program and course feasibility from a staffing and scheduling perspective. 4. Develop a list of proposed seminar and research topics that is responsive to students’ interests and faculty members’ areas of expertise. 5. Report findings from the study (i.e., Implementation Steps 1-3) to the High School Leadership Team and the faculty as a whole for feedback. 6. Findings that suggest that the courses and/or Capstone Diploma are feasible will yield a spring 2017 curriculum recommendation focused on course development. 	<p>Cost of substitute teachers (4 teachers for 2 days each = \$800)</p>	<p><u>Approved.</u> Keeping current with the developments and changes in AP Coursework will be of benefit to our students.</p> <p style="text-align: center; font-size: 24pt;">6</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Liz Cecelia, Russ Hoburg, Colin Syme, Tom Yochum

Level: High School

Area: All Content Areas

Date: November 15, 2016

Curriculum Recommendation

2. Study the requirements, curricula, and feasibility of offering AP Research, AP Seminar, and the AP Capstone Diploma for students in grades 10-12. (Cont'd.)

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>3. Beyond the two new courses that the College Board has adopted (AP Research and AP Seminar), the AP Capstone Diploma has been introduced. This Diploma may be earned by students who score at a designated level on AP tests and complete both AP Seminar and AP Research. Studying this diploma option is important as we consider both students' college and career aspirations and the diversified course offerings that the High School might provide.</p>			7

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: HSLT **Level:** High School
Area: All Academic Areas **Date:** November 15, 2016

Curriculum Recommendation

3. Develop and pilot revised textbook and novel/text evaluation and adoption forms and processes to be used for High School courses.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. The current textbook adoption form was developed many years ago and does not represent evaluation criteria that matches our current standards. Since the time of the creation of the form, many changes in the availability of materials and standards for courses have occurred. There is a need to revise this form for general texts, which also makes this a good opportunity to develop forms that are specific to adoption of novels.</p> <p>2. There is a difference in the criteria that is need to be used for evaluation of textbooks versus single pieces of text such as novels. The use of novels in the ELA courses vary from core novels, to supplemental reading, and choice of research novels. These uses may require different standards for selection and approval.</p>	<ol style="list-style-type: none"> 1. Administrative approval. 2. Develop forms and procedures. 3. Review forms with the each department for input. 4. Use forms for any recommended book additions for the next two years beginning in the spring of 2017. 5. Make adjustments and changes to the forms as needed. 6. Make revisions and recommendation for final use in the of Spring 2018. 	<p> </p>	<p><u>Approved.</u></p> <p style="text-align: center; margin-top: 100px;">8</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Melissa Tungate **Level:** High School
Area: English Language Arts **Date:** December 13, 2016

Curriculum Recommendation

1. Adopt Multimedia Journalism-Print Journalism for 11th and 12th grade students interested in print journalism.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. The current Multimedia Journalism courses, which are not offered during the traditional school day, give students experiences in both broadcast and print journalism. Students currently write newspaper and television copy as well as shooting still photographs and video news packages. This additional focus area allows students who are considering print journalism as a career path an opportunity to develop those skills without having to learn videography or video editing.</p> <p>2. In the past, we have offered a Journalism-Newspaper course that provided credit to students who worked on the school newspaper; however, because of low enrollment due to scheduling conflicts, the course has not been offered in several years. This addition to the MMJ course provides an additional option for students interested in creating the content for the <i>St. Clairion</i>, the student newspaper. Students in this MMJ course will focus on researching, writing, and submitting photographs for written news stories only.</p> <p>3. Because this course is already scheduled outside of the school day, this addition should not create additional stress on the master schedule. Adding this course/focus area would continue providing more options to students that allow for flexible scheduling and provide real world experiences.</p>	<ol style="list-style-type: none"> 1. Administrative approval. 2. Create unit plans and update Rubicon Atlas. 3. Update <i>Program of Studies</i>. 4. Begin offering in 2017-2018 school year. 		<p><u>Approved.</u> This will be a good addition to the current multimedia journalism course and provides creative choices and scheduling.</p> <p style="text-align: center; margin-top: 20px;">9</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Melissa Tungate

Level: High School

Area: English Language Arts

Date: December 13, 2016

Curriculum Recommendation

3. Move *Unbroken* by Laura Hillenbrand from supplemental text to core text in Academic English 10 classes and move *All Quiet on the Western Front* by Erich Maria Remarque from core to supplemental text option.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. <i>Unbroken</i> will be exchanged with <i>All Quiet on the Western Front</i> as a core text for the following reasons:</p> <p>a. <i>Unbroken</i> provides opportunities for cross-textual exploration as it connects to <i>Night</i> by Elie Wiesel, another memoir in the 10th grade curriculum that focuses on Wiesel’s concentration camp experience during the Holocaust, and <i>The Odyssey</i> by Homer, another journey of perseverance and overcoming hardships.</p> <p>b. <i>Unbroken</i> allows for PLC interdisciplinary connections as World War II is studied in all three tenth grade history courses.</p> <p>c. Unlike <i>All Quiet on the Western Front</i>, <i>Unbroken</i> contains many historical photographs, adding to the study of an informational text as supported by the PA Core Standards.</p> <p>d. The themes throughout <i>Unbroken</i> are more age-appropriate and engaging for young adult readers as Louie’s story teaches lessons about perseverance, resourcefulness, maintaining optimism, and finally forgiveness. While <i>All Quiet on the Western Front</i> is also a story of a soldier’s experience, the text is sometimes less engaging for teenage readers due to its word choice and style.</p> <p style="text-align: center;">(Cont’d.)</p>	<p>1. Administrative approval.</p> <p>2. Create unit plan and update Rubicon Atlas.</p> <p>3. Begin implementation Spring 2017.</p>	<p></p>	<p><u>Approved.</u> Finding compelling novels that engage students is always in line with the District’s mission.</p> <p style="text-align: center;">11</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Melissa Tungate **Level:** High School
Area: English Language Arts **Date:** December 13,, 2016

Curriculum Recommendation

3. Move *Unbroken* by Laura Hillenbrand from supplemental text to core text in Academic English 10 classes and move *All Quiet on the Western Front* by Erich Maria Remarque from core to supplemental text option. (Cont'd.)

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>2. The original adult version of <i>Unbroken</i> received many awards, including the Los Angeles Times Book of the Year Award for Nonfiction, Time Magazine’s Best Non-Fiction Book of the Year, and American Library Association’s Notable Book.</p> <p>3. <i>All Quiet on the Western Front</i> will remain a supplemental book choice for students interested in this subject matter.</p>			12

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Steve Miller

Level: High School

Area: Mathematics

Date: November 17, 2016

Curriculum Recommendation

1. Offer IB Diploma Program students the option to take Calculus or AP Calculus AB to fulfill year two of the IB SL Curriculum.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. Because of our implementation of the IB math curriculum, students in the two-year Standard Level course are currently taught together with students in Honors Functions, Statistics, and Trigonometry in year one and AP Calculus AB in year two. This recommendation aims to provide another option to IB students who have struggled to be successful under this implementation. This recommendation aligns with the High School Experience SEL goal.</p> <p>2. A study of the IB SL curriculum along with the curriculum of Honors FST, AP Calculus AB, and Calculus revealed that 61% of curriculum content in IB SL is covered by the curriculum in Honors Functions, Statistics, and Trigonometry, 33% of the content in IB SL is covered by AP Calculus AB, and the remaining 6% has been taught as a supplementary unit for the IB students year two. The 33% covered in AP Calculus AB is also covered in Calculus, so students could take that course in lieu of AP Calculus AB without missing any calculus content from the IB curriculum.</p> <p>3. The supplemental unit that is currently taught to the IB year two students within the AP Calculus course could be offered to students as a hybrid experience for those students who opt to take Calculus instead of AP Calculus AB. This is in line with High School Experience goal of customizing time and schedule to meet students' needs.</p>	<ol style="list-style-type: none"> Administrative approval. Add the course offering to the <i>Program of Studies</i>. Prepare hybrid experience for supplemental Vectors unit. 	<p>2 teachers x 12 summer flex hours</p>	<p><u>Approved.</u></p> <p align="center">13</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Don Pickell/Sarah Shoemaker **Level:** High School
Area: Performing Arts **Date:** November 17, 2016

Curriculum Recommendation

1. Formalize an Audition Only Orchestra Extra Curricular Experience for students who want to play more challenging music and study their instrument in greater depth than can be offered in the traditional orchestra course.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. The District tagline includes an emphasis on <i>customizing learning</i>. An important component of customization is consistent reflection upon current curricular models.</p> <p>2. With the current offering of a single orchestra class, there is room to add an opportunity for advanced students to study more difficult and enriching music.</p> <p>3. Ms. Shoemaker has already been offering Chamber Orchestra to her students. This curriculum recommendation would formalize this as a course offering, allowing students to receive credit and a grade.</p> <p>4. The class would be offered as a 17/18 (after school) activity similar to Chanteclairs, allowing students to participate without putting extra strain on an already tight schedule. Credit and grades will not be applicable because this is an extra curricular offering.</p>	<p>1. Administrative approval.</p> <p>2. Update <i>Program of Studies</i>.</p> <p>3. Summer work to develop curriculum.</p>	<p>Conductor stipend to be determined.</p>	<p><u>Approved.</u> The stipend will be evaluated based on similar programming. This recommendation is consistent with current vocal music practices.</p>
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UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Don Pickell **Level:** High School
Area: Performing Arts **Date:** 11/17/16

Curriculum Recommendation

2. Combine the courses Concert Band and Wind Symphony to create a single course, Symphonic Band and combine Jazz Ensemble 2 and Jazz Lab Band to create a single course, Jazz Ensemble 2.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. For the past 10 years, these courses have been scheduled individually but combined for concerts.</p> <p>2. Renaming and combining the classes will allow for more efficiency relative to scheduling and course registration.</p>	<p>1. Administrative approval.</p> <p>2. Update the <i>Program of Studies</i>.</p> <p>3. Meet with counselors and inform other staff of the change.</p>		<p><u>Approved.</u></p> <p style="text-align: center; margin-top: 100px;">15</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Lynn Kistler Level: High School
 Area: Science Date: November 17, 2016

Curriculum Recommendation

1. Redesign the Forensic Chemistry class to include a hybrid experience and reflect the changed course by changing the name to Forensic Science.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. To successfully “deliver excellence” and “customize learning” the best learning environment for each child is needed. This can be a challenge based on district resources and staff. A hybrid course has the potential to provide greater opportunities for success of the student.</p> <p>2. Historically this course has included a very heterogeneous student population. While many students take the course as an additional fourth or even fifth science course, others take the course to meet the third science credit requirement and thus have limited science background. By transitioning the course to a hybrid approach, customization to better meet the needs of this diverse population would be achieved.</p> <p>3. In any hybrid class, student learning should remain the focal point. As such, the course would be set up that all students report to class on specific days while on other days, on-line or other experiences would be expected. Those students who need individual attention or remediation or additional time to complete assignments would attend class during independent work days.</p> <p style="text-align: center;">(Cont’d.)</p>	<ol style="list-style-type: none"> 1. Administrative approval. 2. Update the <i>Program of Studies</i> and inform counseling of the changes to the course. 3. Research and propose supporting course materials to facilitate the change to a hybrid approach. 4. Provide release time for forensic teachers to observe and learn best practices from those currently developing hybrid courses. 5. Provide Summer Workshop time for teacher to obtain training on new resources and set up the new structure for the course. 6. Collaborate with key district personnel (e.g. Supervisor of Customized and Online Learning) as part of the ongoing development and implementation of the course. 7. Provide opportunity for teacher to attend conferences or workshops that focus on heterogeneous student groups, lab set-ups, cost reduction options, and student learning objectives. 	<p>Summer workshop 40 hours @ \$30.20/hour = \$1208</p> <p>Textbooks/ digital resources: 100 @ \$100 = \$10,000</p> <p>Conference/ workshops approximatel y \$2000</p>	<p><u>Approved.</u> Providing flexible and customized experiences is in alignment with the District’s strategic plan.</p> <p style="text-align: center; font-size: 1.2em;">16</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Lynn Kistler **Level:** High School
Area: Science **Date:** November 17, 2016

Curriculum Recommendation

1. Redesign the Forensic Chemistry class to include a hybrid experience and reflect the changed course by changing the name to Forensic Science. (Cont'd.)

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>4. The course name of Forensic Chemistry has led to much confusion since the inception of the program. Many students and counselors believe the class is an extension of chemistry. However, Forensic Science is a more encompassing field which includes physics, biology, geology, anatomy, and chemistry. The course name change to Forensic Science would better reflect the course content.</p> <p>5. With the changing structure of the forensic chemistry course, additional digital resources will be required to provide student access to updated forensic practices and techniques, course content, and relevant court cases. In establishing the course as a hybrid approach, students will be required to perform virtual labs in addition to other course requirements outside of the classroom setting. The purchase of digital resources will be a necessary component of the re-structured course.</p> <p>6. The adopted textbook (purchased in 2003) is a college level text as forensic science was not a common high school course offering. This college level text is both intimidating and challenging for some in the class. Additionally, the field of forensic science has rapidly developed and techniques and standards have changed significantly in the past decade.</p>			17

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Lynn Kistler

Level: High School

Area: Science

Date: November 17, 2016

Curriculum Recommendation

2. Pilot a full-year, interdisciplinary science course titled Bioinformatics.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. Bioinformatics is a wide-reaching field of analyzing biological information. Careers in the areas of bioinformatics are on a steady rise and projected to grow in the future. Many high school students are not exposed to multidisciplinary concepts and so the opportunities are often sent to other parts of the globe.</p> <p>2. Recent news articles have tens of millions of dollars being dedicated to personalized medicine and big data initiatives. The University of Pittsburgh recently received grants for initiatives in personalized medicine. At the Frontier Conference recently held in Pittsburgh, it was announced that federal funding would be awarded for developments in multiple initiatives including precision medicine initiatives which directly relates to bioinformatics and shows the growing importance of this field.</p> <p>3. The Next Generation Science Standards (NGSS) emphasize the use of models and the construction of explanations supported with evidence. The critical thinking skills developed as students work across multiple science disciplines will provide an opportunity for USC students to practice these skills.</p> <p style="text-align: center;">(Cont'd.)</p>	<ol style="list-style-type: none"> 1. Administrative approval. 2. Update the <i>Program of Studies</i>. 3. Provide summer workshop time for course and curriculum development. 4. Provide teacher training. (Coursera, CMU, PSC, etc.) 5. Setup subscriptions of online databases and bioinformatics sites. 6. Designate the course as an Honors Level course. 7. Specify a computer lab or laptop cart for access to computer resources. 8. Continue the course preparation using Pittsburgh Supercomputing Center files and <i>Bioinformatics Algorithms</i> book. 9. Meet with counselors to inform them of the new course along with course design, structure, and appropriate students. 	<p>Summer workshop time (40 hours @ \$30.20 = \$1208)</p> <p>Subscriptions to online sites and databases.</p> <p>Continued teacher training.</p>	<p><u>Approved.</u> Bioinformatics is an excellent example of interdisciplinary coursework and should provide our students with an integrated view of the world through science, technology, and math.</p> <p style="text-align: center; font-size: 1.2em;">18</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Lynn Kistler **Level:** High School
Area: Science **Date:** November 17, 2016

Curriculum Recommendation

2. Pilot a full-year, interdisciplinary science course titled Bioinformatics. (Cont'd.)

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>4. Bioinformatics involves the use of problem-solving skills and logical-thinking skills drawing on their backgrounds in physics, chemistry, and biology. Employers place a high value on workers who display strong logical thinking or reasoning skills.</p> <p>5. Opportunities for collaboration and student involvement in bioinformatics can be found with the Pittsburgh Supercomputing Center and with Carnegie Mellon University Professor Dr. Phillip Compeau. The Pittsburgh Supercomputing Center offers student projects, field trips, and in-class support. Dr. Compeau offered students the opportunity to visit CMU and be involved in microassay and sequencing data labs.</p> <p>6. Topics in the course include 21st Century STEM careers, molecular biology, molecular basis of genetic diseases, connections of chemistry, physics, and math to understand biology, NCBI and Blast web offerings, algorithms, evolutionary relationships and phylogenetic trees, protein folding and misfolding, and deriving significance from gene.</p>			19

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Lynn Kistler **Level:** High School
Area: Science/Technology Education **Date:** November 17, 2016

Curriculum Recommendation

3. Change the name of “STEAM Design Lab” course to “Innovation Studio.”

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. This course was written in partnership with South Fayette teachers and administrators. As each school introduced the course, each named the class to appeal to their particular students. South Fayette named the course Innovation Studio and Upper St. Clair named the course STEAM Design Lab.</p> <p>2. Many of the documents that are shared across district lines have different titles based upon which district generates the files. This has led to confusion for students in both classes.</p> <p>3. The STEAM acronym has been closely affiliated with the Upper St. Clair Summer STEAM Academy. While that may be an appropriate name for the Academy, it does lead to confusion for many students when it comes time to schedule classes at the high school. The name change would more appropriately indicate the multi-disciplinary content of the course.</p> <p>4. Having a common name for the course across districts would better align with the initiative to expand the program into more schools in the greater South Hills area.</p> <p style="text-align: center;">(Cont'd.)</p>	<ol style="list-style-type: none"> 1. Administrative approval. 2. Update the <i>Program of Studies</i>. 3. Meet with counselors and inform other staff of the change. 		<p><u>A name change is approved.</u> Further discussion needs to be held to determine a title that would more fully capture the essence of this course.</p> <p style="text-align: center; font-size: 1.2em;">20</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Lynn Kistler **Level:** High School
Area: Science **Date:** November 17, 2016

Curriculum Recommendation

3. Change the name of “STEAM Design Lab” course to “Innovation Studio.” (Cont’d.)

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>5. The STEAM acronym is not as familiar to the general public as STEM. While it is certainly important to recognize the value of the Arts in creating innovative solutions to problems, people may not recognize that STEAM is an expanded version of STEM. This probably causes confusion to students, parents, industry partners and other potential school partners.</p> <p>6. A common name across all partnering schools would lead to “brand recognition” that could be leveraged to attract a variety of industry partners. Bethel Park and Mt. Lebanon school districts have enthusiastically joined South Fayette and Upper St. Clair to form a core consortium of schools working together to serve industry partners as well as community partners. Other obvious schools that might be interested would be neighboring Peters Township, Chartiers Valley and Cannon-McMillan. As each school joins, they would adopt the name of the course as well as the general curriculum.</p>			21

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Lynn Kistler **Level:** High School
Area: Science **Date:** November 17, 2016

Curriculum Recommendation

4. Support customization through the adoption of digital resources for the AP Chemistry course. (Cont'd.)

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>4. Course management software will accommodate the mastery learning model by providing the tracking and testing materials needed for implementation of differentiated instruction. Similar programs have been successfully implemented in other science and math courses. Research indicates statistically significant improvement in student performance and final grades. http://www.cengage.com/owlv2/downloads/Teaching_with_Technology_to_Engage_Students_and_Enhance_Learning.pdf</p> <p>5. Current trends in secondary and post-secondary education include use and application of online educational learning programs. Introducing such programs in high school provides students with a better opportunity for success in college.</p>			23

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Lynn Kistler **Level:** High School
Area: Science **Date:** November 17, 2016

Curriculum Recommendation

5. Study the expansion of the robotics program to include advanced robotics and robotics competitions.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. The use of robotics in society and the workplace is ever increasing in the home, manufacturing, transportation, healthcare, etc. Knowledge and understanding of the building and programming of robots as well as appreciating the impact of robots, personally and in society, are all benefits of the current robotics course.</p> <p>2. Students who elect to enroll in the robotics course come from a very wide range of ability and knowledge including some who made and programmed robots as a hobby to those with no experience whatsoever. This diverse group provides a challenging environment for the course.</p> <p>3. The current VEX robots used in the program are limited in their abilities. Additionally, some students have expressed interest in participating in various robotics competitions both regionally and nationally.</p> <p>4. The addition of an advanced level robotics program as well as participation in competitions would meet the needs of the more experienced robotics student.</p>	<p>1. Administrative approval.</p> <p>2. Explore various competitions for goals, requirements, and costs.</p> <p>3. Survey other local schools to assess the other robotics courses in the region.</p> <p>4. Evaluate the methods to deliver the instruction for an additional course given the limited space and teacher resources.</p>		<p><u>Approved.</u> Expanding robotics supports the District's strategic plan related to STEAM and redefining the high school experience.</p> <p style="text-align: center; margin-top: 20px;">24</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Judy Bulazo **Level:** Middle School
Area: STEAM **Date:** November 9, 2016

Curriculum Recommendation

1. Explore the potential for creating and developing an Innovation Hub and related programming at Fort Couch Middle School.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. The District’s Strategic Plan focuses on STEAM as one of five major areas of emphasis for the next five years. Action plans developed through the strategic planning process have resulted in many recommendations including the expansion of STEAM programming and the related Innovation Hub concept. Community support for this type of STEAM programming is strong.</p> <p>2. The development of the Boyce Innovation Hub, made primarily possible through grant money and private funding, has been enthusiastically embraced by students and families. The early successes seen in the pilot of a design-thinking, problem-based, expressive arts course at grades 5 and 6, currently at the heart of this Innovation Hub, has created the impetus to consider this type of programming for students in grades 7 and 8.</p> <p style="text-align: center;">(Cont’d.)</p>	<ol style="list-style-type: none"> 1. Administrative approval. 2. Gather a team of representatives from all related areas. Conduct an idea generating and input session related to programming, needs, and uses for innovation spaces and programming. 3. Determine potential spaces that fit identified needs and ideas. 4. Seek funding. 5. Make programming and space recommendations in the spring of 2017. 		<p><u>Approved.</u> Extending this concept from Boyce to Fort Couch is an excellent approach for exposing middle school students to the design and innovation processes.</p> <p style="text-align: center; margin-top: 20px;">25</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Judy Bulazo **Level:** Middle School
Area: STEAM **Date:** November 9, 2016

Curriculum Recommendation

1. Explore the potential for creating and developing an Innovation Hub and related programming at Fort Couch Middle School. (Cont'd.)

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>3. Many of the action plans of the Strategic Plan center around creating K-8 STEAM experiences that promote the skills of creativity, innovation, problem solving, collaboration, and logical and critical thinking. These action plans are also centered on exposing students to these experiences and concepts so that they can chose their high school coursework from an informed perspective. Students should have the opportunity to gain great skills, but also be better informed about STEAM areas in order to determine additional experiences and courses that they would like to pursue.</p> <p>4. This exploration will provide an opportunity to examine how the middle school expressive arts courses and programming can be integrated into the Innovation Hub in a way that unites the STEAM concepts into coordinated programming. Our strong science and mathematics programming at the middle school level will also serve as a solid support for this additional STEAM coursework. Integrated STEAM experiences will help students to make connections between and across these and other subject areas.</p> <p>5. There are a variety of wonderful spaces that exist at Fort Couch that could be used to provide areas for STEAM experiences. Consideration could be given to the development of multiple spaces to address different STEAM needs and opportunities.</p>			26

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Amy Pfender and Melissa Garvin **Level:** K-12
Area: Student Support Services/Special Education **Date:** November 9, 2016

Curriculum Recommendation

1. Adopt the PCI reading program to expand customized curricular programs in reading in order to best meet the vast array of student needs across the continuum of special education classrooms.

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>1. It is necessary to have a selection of programs that are appropriate to meet students’ learning styles through a variety of different strategies, support teacher instruction, and provide effective progress monitoring in a learning support classroom. With the implementation of the Pennsylvania Common Core Standards, the USCSD Special Education Plan identified reading as an area of professional development in order to review the continuum of reading programs available to special education students.</p> <p>2. PCI is a scientifically research-based curriculum designed to teach students with developmental disabilities and autism who are non-readers.</p> <p>3. PCI has three levels providing an effective scope and sequence as students master each level. Students receive intense instruction, hands-on practice, and assessment on high-frequency and real-world words leading to increased word reading. Direct instruction is intentional with components providing ongoing repetition for student growth and mastery.</p> <p>4. Currently, Level 1 is being implemented in select classrooms. Data is showing effective student progress providing further evidence that the program is meeting students’ needs and a full implementation is necessary in order to have availability to all three levels as students master levels at an individual pace.</p>	<p>1. Administrative approval.</p> <p>2. Four teachers across levels will be identified to further discuss:</p> <ul style="list-style-type: none"> • Program implementation and training needs • Additional material needs • Identification of students to be taught using the program and the use of progress monitoring data <p>3. Review current reading programs utilized in K-12 special education classrooms to determine appropriate instructional alignment with shifts in standards.</p>	<p>Approximately \$5,000 over the 16-17 and 17-18 school years</p> <p>Ongoing costs to continue to support program implementation and expansion</p>	<p><u>Approved.</u> Finding and evaluating resources for this population of students is commendable.</p> <p style="text-align: center; font-size: 1.2em;">27</p>

UPPER ST. CLAIR SCHOOL DISTRICT
FAST TRACK CURRICULUM RECOMMENDATIONS FOR 2016-2017



Name: Lauren Madia and Amy Pfender **Level:** K-4
Area: Student Support Services / Counseling **Date:** November 1, 2016

Curriculum Recommendation

2. Pilot the use of the Second Step social-emotional learning curriculum in Grades 1, 2, and 3 during the 2016-2017 School Year. (Cont'd.)

Reason(s) for Recommendation	Implementation Steps	Cost	Administrative Reaction
<p>7. An empirical study found that the use of Second Step significantly increased feelings of safety (Social and Character Development Research Consortium. (2010) <i>Efficacy of schoolwide programs to promote social and character development and reduce problem behavior in elementary school children.</i> Washington, DC: Author)</p>			29