WRPS AGENDA

Wisconsin Rapids Board of Education

Educational Services Committee

510 Peach Street · Wisconsin Rapids, WI 54494 · (715) 424-6701

November 7, 2016

LOCATION: Board of Education, 510 Peach Street, Wisconsin Rapids, WI
Conference Room A/B

TIME: Immediately following the Business Services Committee and Personnel Services Committee meetings, but not before 6:15 p.m.

I. Call to Order

II. Public Comment

III. Actionable Items

There are no actionable items.

IV. Updates

A. Boys and Girls Club
B. 2015-16 Wisconsin Student Assessment System (WSAS) Results
C. New Course and Curriculum Proposals - Discussion

V. Consent Agenda Items

VI. Future Agenda Items/Information Requests

WRPS BACKGROUND

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IV. Updates

A. Boys & Girls Club

Kent Anderson, Director of the Boys & Girls Club of the Wisconsin Rapids Area (BGCWRA), will be present to update the Committee on the work of the Club. Information about how Wisconsin Rapids Public Schools (WRPS) and BGCWRA have partnered to improve the lives of area youth will be shared.

B. 2015-16 Wisconsin Student Assessment System (WSAS) Results

The 2015-16 WSAS results will be shared with the Committee. Information from the Forward Exam, ACT Aspire, and the ACT will be discussed. Attachment A sets out a brief overview of the performance of WRPS students on the statewide exams. Kathi Stebbins-Hintz, Director of Curriculum and Instruction will be present to provide a more detailed analysis of the 2015-16 assessment results.

C. New Course and Curriculum Proposals – Discussion

Board Policy 332 Experimental/Innovative Programs, Board Policy 332.1 – Exhibit 1- Process Guidelines for Requesting New Courses Form, and Board Policy 332.2 – Exhibit 2- Process Guidelines for Pilot Programs or Curriculum Modifications Form, set out the requirements to add or modify courses or curriculum in WRPS. Any proposals for course or curriculum additions or modifications are submitted to the Director of Curriculum and Instruction for consideration no later than the end of September. In addition, before being submitted for consideration, such proposals must be reviewed by relevant CII Sub-Committees and building leadership committees. After review by the necessary committees, proposals are brought to the District CII Committee for review. The CII then casts an advisory vote on each proposal. Curriculum proposals are brought to the Educational Services Committee for review in November. At the December Educational Services meeting, Committee members are asked to vote on each proposal. The vote will occur after being presented with a summary of the CII's discussion and advisory vote. Ms. Stebbins-Hintz will be present to explain the curriculum proposals. Each proposal is listed below, along with a corresponding attachment.

1. Family and Consumer Economics: Teach and Lead (Attachment B)
2. Language Arts: English 4 (Attachment C)
3. Math
   a. Algebra Topics - modifications (Attachment D)
   b. Foundations for Advanced Algebra (Attachment E)
4. Music: String Orchestra (Attachment F)
5. Science (Attachment G)
   a. Life Sciences and Society
   b. Physical Sciences and Society
   c. Forensics Science
   d. PLTW: Principles of Bio-Medical Science
6. Social Studies
   a. Contemporary Issues (Attachment H)
   b. Introduction to Economics (Attachment I)

V. Consent Agenda Items

There were no consent agenda items.

VI. Future Agenda Items/Information Requests

Agenda items are determined by the Committee Chair after consultation with appropriate administration depending upon other agenda items, presentation information, and agenda availability.

Future agenda items/information requests include, but are not limited to:

- New Course and Curriculum Proposals – Approval (December)
- Supplemental Pay Plan for Professional Development (December)
- Class Size Limits (January)
- Elementary English Language Arts Curriculum Update (January)
- Art Curriculum Update (February)
- Student Travel Update (February)
- Strategic Plan (February)

Attachment A

Wisconsin Student Assessment System (WSAS)
2015-16

Forward and DLM Exam

Grade	ELA		Math	
	WRPS	WI	WRPS	WI
3	45.9%	44.3%	44.5%	49.4%
4	46.9%	44.5%	40.2%	45.8%
5	44.7%	43.6%	47.1%	45.5%
6	39.6%	43.6%	40.4%	44.1%
7	50.6%	42.9%	41.2%	40.3%
8	44%	42.1%	36.4%	34.6%

Grade	Social Studies		Science	
	WRPS	WI	WRPS	WI
4	56.7%	54.2%	58.7%	52.4%
8	60.1%	50.6%	55.7%	50.1%
10	56.5%	48.4%	--	--

ACT Aspire

% College Ready in Wisconsin Rapids Public Schools

	Grade 9		Grade 10	
	2014-15	2015-16	2014-15	2015-16
English	64.7%	60.5%	76.6%	65.4%
Reading	38.6%	35.6%	44.9%	46.0%
Math	39.9%	38.6%	33.7%	35.6%
Science	41.3%	35.3%	40.8%	43.9%
Writing	41.2%	46.1%	69.1%	59.3%

ACT – Statewide

Grade 11

	% College Ready - WRPS		Average Composite Score - WRPS	
	2014-15	2015-16	2014-15	2015-16
English	65.4%	67.1%	20	20.3
Reading	35.4%	37.9%	20.2	20.6
Math	36.5%	28.6%	19.8	19.4
Science	32.4%	36.7%	20.2	20.7
Writing	N/A	N/A	20.2	20.4

ACT - GRADUATES
AVERAGE ACT SCORES

	Total Tested		English		Mathematics		Reading		Science		Composite	
Grad Year	District	State	District	State	District	State	District	State	District	State	District	State
2011	312	47,693	21.5	21.6	21.7	22.1	22.0	22.2	22.4	22.3	22.1	22.2
2012	246	47,588	20.9	21.5	21.5	22.0	21.6	22.1	21.8	22.1	21.6	22.1
2013	261	46,574	21.6	21.5	21.7	22.0	22.8	22.3	22.3	22.2	22.2	22.1
2014	222	46,870	21.7	21.6	21.3	22.0	22.7	22.4	22.3	22.3	22.1	22.2
2015	215	46,738	21.5	21.6	21.3	22.0	22.9	22.5	22.2	22.3	22.1	22.2
2016	**398**	**66,564**	**20.0**	**19.7**	**19.7**	**20.4**	**20.4**	**20.7**	**20.2**	**20.7**	**20.2**	**20.5**

Attachment B

New Course Proposal

2017-18 School Year

Teach & Lead

.5 Elective Grades 10-12

Requested by:

Lynn Borski and Valerie DeVries-Polman,

Family and Consumer Sciences

Eric Siler, Career & Technical Education Coordinator

Rationale

The Family and Consumer Sciences (FCS) program is a partner in the state's and district's mission to prepare students for success with college, careers, and 21st Century workplace skills. We feel a new course called Teach and Lead will address the growing concern over the shortage of teachers. The National Education Association reported in March 2016 that the number of college students reporting they will major in education is at an all time low. According to US Department Office of Postsecondary Education, 2016-17 statewide academic disciplines or subject matter already experiencing teaching shortages are: Career and Technology Education, Business Education, Family and Consumer Education (FACE), Technology Education, Special Education, Cognitive Disabilities Cross Categorical, Deaf and Hard of Hearing, Early Childhood–Special Education, Emotional/Behavioral Disorders, Learning Disabilities, School Speech and Language Disabilities, Visual Disabilities, Standard Disciplines, ESL/Bilingual Education, Foreign Languages, Library Media, Mathematics, Music, Reading and Sciences.

The course Teach and Lead will give our students an opportunity to earn an elective credit (.5) and explore the Education and Training career cluster and more specifically the pathway of Teaching and Training, as well as the Professional Support Services field. Research supports that academic achievement is improved for many students when core content is taught in an authentic context. Family and Consumer Sciences is an authentic context for learners. The course will encourage students who enjoy specific content areas to consider teaching as a profession and students will participate in learning experiences to explore the art of teaching. The FCS department is a good fit for the Teach and Lead class as its department already offers a transcripted credit course, Assistant Child Care Teacher, for future early childhood educators and support staff. The FCS Career and Technical Student Organization (CTSO), Family, Career, and Community Leaders of America (FCCLA) has an excellent model in place for students to carry out a standards based "Teach and Train" project to shadow a certified teacher and experience the teaching process. Students will also apply teaching and leadership skills gained from the course to their own families and communities.
(Resource: Teacher Shortage Areas Nationwide Listing 1990–1991 through 2016–2017 August 2016 U.S. Department of Education Office of Postsecondary Education)
http://neatoday.org/2016/03/15/future-teachers-at-all-time-low/
http://www2.ed.gov/about/offices/list/ope/pol/tsa.pdf

Communication

CTE and FCS draft proposal approval
CTE CII approval
Draft Proposal to Director of Curriculum
LHS cabinet
District CII
Board of Education
Course offered in Program of Studies for 17-18 school year

Standards & Curriculum Resources

I. Wisconsin Common Career Technical Standards (WCCTS)

Content Area: 4C: Creativity, Critical Thinking, Communication, and Collaboration.

Students will think and work creatively to develop innovative solutions to problems and opportunities
Content Area: CD: Career Development
Students will consider, analyze and apply awareness of self, identity, and culture to identify skills and talents.
Content Area: GCA: Global and Cultural Awareness
Students will propose solutions and initiatives related to global issues
Content Area: IMT: Information, Media, and Technology Skills
Students will access, interpret, and evaluate information from a variety of sources in order to inform and support premises, arguments, decisions, ideas, and initiatives

II. Wisconsin Standards for Family and Consumer Sciences: Family and Community Services

Standard: FCS1: Students will synthesize knowledge, skills and practices required for careers in family and community services

II. Educators Rising https://www.educatorsrising.org/

- Standard I: Understanding the Profession
  - Exploring the profession
  - Becoming an accomplished professional
  - Engaging stakeholders
  - Advocating for the profession
  - Reflecting on the profession
- Standard II: Learning About Students
  - Gaining self-knowledge
  - Developing cultural competence
  - Understanding different learning needs
  - Reflecting on students
- Standard III: Building Content Knowledge-Know, Understand, & Practice
  - Planning an educational pathway
  - Developing content expertise
  - Considering multiple perspectives
  - Making content connections
  - Reflecting on content knowledge
- Standard IV: Engaging in Responsive Planning
  - Meeting student needs

- Designing learning environments
- Utilizing content and pedagogical knowledge
- Developing instructional methods and strategies
- Building lesson plans
- Collaborating with stakeholders
- Reflecting on planning

- Standard V: Implementing Instruction
  - Establishing learning environments
  - Communicating with students
  - Utilizing instructional strategies
  - Use of technology to promote learning
  - Fostering critical thinking
  - Reflecting on instruction
- Standard VI: Using Assessment and Data
  - Acquiring assessment literacy
  - Using assessment to inform instruction
  - Analyzing and interpreting data
  - Collaborating with stakeholders
  - Reflecting on assessment
- Standard VII: Engaging in Reflective Practice
  - Developing a reflective mindset
  - Reflecting to support learning
  - Reflecting with purpose

Resources and curriculum materials:

Family Career and Community Leaders of America Teach and Train Project-based learning.

Sample course final project for Teach & Lead students:

Sample Final Project for Teach & Lead Class

EdRising Virtual Campus: "Educators Rising resources are designed to be integrated directly into elective courses and CTE programs of study. The resources have been carefully crafted and curated to help students to take their first steps on the path to great teaching"

Educator Rising resources and teaching tools:

https://www.educatorsrising.org/

https://www.educatorsrising.org/what-we-offer/standards

Educators Rising Frequently Asked Questions:

https://www.educatorsrising.org/uploads/people/Join-the-Network_FAQ_TeachAdmin_StartNew.pdf

Textbook: Kato, Sharleen L., Ed.D. *Teaching*. Tinley Park, IL: Goodheart-Willcox, 2016. Print.

- **Who will write the curriculum?**
  WRPS FCS staff
- **When will the curriculum be developed?**
  The curriculum will be developed during the summer of 2017
- **What schedule or staff assignments may need to be changed?**
  None, FCS licensed teachers are certified to teach the course.
- **What professional development needs may be necessary to implement the curriculum?**
  Carl Perkins grant funds will be used for best practice site visits and curriculum development.

Resources (covered under Carl Perkins Grant)

Curriculum Development Time	12 hours
Staff Development Time	8 hours
Instructional Materials	textbooks / online resources
Staffing anticipating	1 section initially
Space, equipment, furniture	no change

Statement of Impact

The Teach and Lead course would give students a unique opportunity to explore the Education and Training career cluster while still in high school, learn from accomplished teachers, and allow for student choice to focus on content areas they are passionate about to plan lessons and projects to teach and lead others.

Attachment C

Modified/New Course Proposal

English 4

(Course title may require modification after course review for NCAA eligibility)

Requested by:
LHS Language Arts Department, Miranda Moody, Department Chair

Explanations and Rationale:

Over the last few years, the Language Arts department at Lincoln has seen a reduction in the number of students taking Search for Identity, Literary Media Studies, and Contemporary Literature. During the 2016-2017 school year, Search for Identity did not have enough students register to run a section, and Literary Media Studies and Contemporary Literature only ran one section each. Due to this decrease in student interest, the Language Arts department discussed eliminating these three classes and replacing the three options with a new one-term course, English 4. This English 4 course is designed to more fully address the strands of the ELA standards and be a continuation of material and content that students learned in their junior level English class.

Communication/Timeline

Stakeholders:	12th grade students LHS Language Arts Department
Spring 2016:	Course idea shared with LHS Lang. Arts department and administration
Spring 2016:	Course idea shared with Language Arts CII sub-committee
Fall 2016:	Proposal shared with LHS Lang. Arts department and Lincoln administration
Fall 2016:	Proposal shared with Lang. Arts CII sub-committee and Lang. Arts CII committee
February 2017:	Students are informed of the course through the registration process.
2017-2018:	Course implementation.

Curriculum

The course description for English 4 will be:

This single-term course is designed to extend the reading, writing, listening, and speaking skills learned in previous junior-level English courses. This course focuses on thematic studies of literature and informational text. Students can expect to work independently and cooperatively to analyze and interpret texts and other forms of media while determining central ideas, making inferences, and evaluating authors' techniques and purposes. The composition work, including both short and extended time frames, will involve argumentative essays and opinion writing to develop students' ability to think critically and back their interpretations effectively with text evidence. Conventions work is individualized based upon needs that surface within the context of students' writing.

The curriculum will be written by the Lincoln Language Arts Department using the ELA common core standards.

Resources
Curriculum Development Time: 40 hours at $18.00/hr

Staff Development Time: None

Instructional Materials: Using materials already in the department

Space, Equipment, Furniture: None

Staffing: An LHS staff member. No additional FTE's are required.

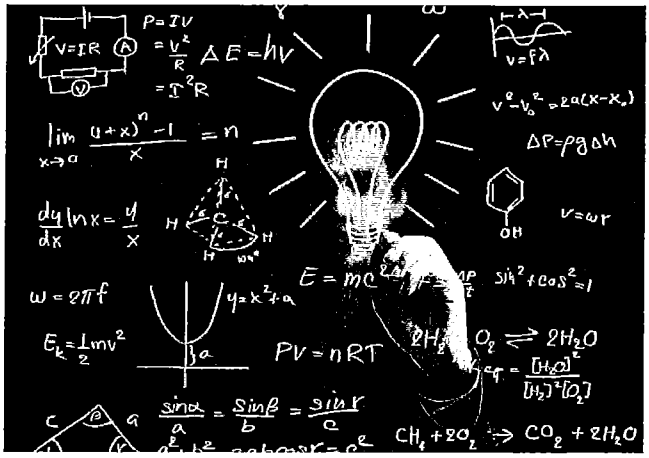
Evaluation
Student success in this course will be evaluated at the end of the course. Any modifications to the criteria for student enrollment can then be made for the following year.

Evaluation will be conducted by the LHS Language Arts Staff and administration, and shared with the Language Arts CII.

Summary/Statement of Impact
This class is designed to continue the education that students receive in their junior-level English courses. The curriculum and content taught will prepare students to be college and career ready, regardless of their future educational path. By implementing this course, the Language Arts Department at Lincoln will provide students an additional option to earn graduation credit, as well as, continuing to give them options that best suit their needs and interests.

Attachment D

Math Course Proposal



Algebra Topics (Change in Format and Delivery)

Requested by: Kim Akey and Traci Pronga

A. Request proposed by Kim Akey (math coordinator) and Traci Pronga (East Junior High department chair)

B. Rationale

Algebra Topics is currently a 1.0 credit math course for ninth-grade students, which intends to provide a bridge between Math 8 curriculum and Algebra 1 curriculum. In particular, Algebra Topics begins with a thorough review of number operations, then exposes students to selected topics from the Algebra 1 curriculum. The goal is to ensure student mastery of the previous topics while preparing the student for future success in Algebra 1 and Geometry.

Concerns with the present format:

- Students who take Algebra Topics are set back an entire year in math, not taking Geometry until their junior year
- There is a history of too many students being enrolled in Algebra Topics, some for behavior/motivation reasons
- With trimesters, struggling students won't get a full year of math in 9th grade, potentially leaving them with learning gaps or forgotten material

Proposed change and reasoning:

- Reduce Algebra Topics from a 1.0 credit course to a 0.5 credit course, condensing the material to be taught only during the first trimester (Term 1)
- Students who take Algebra Topics Term 1 will then take Algebra 1 Terms 2 and 3
- This change will prevent students from falling a year behind in math, while still getting a review of Math 8 curriculum and a front-loading of Algebra 1 curriculum
- This change will also provide struggling students with a full year of math in 9th grade
- Algebra Topics should be limited to 2 sections. Placement will continue to be determined based on a variety of academic considerations.

C. Communication

On October 3, 2016 the secondary math department (teachers in grades 6-12) brainstormed ideas for addressing the concerns about Algebra Topics. A favored change was to reduce the class to 0.5 credits and condense the curriculum so that students who take Algebra Topics can still take Algebra during their freshman year. The department voted unanimously in support of this change.

D. Curriculum

The curriculum will remain the same, with parts being condensed or trimmed down to fit into the new timeframe. The Algebra Topics teacher, as well as any other interested staff members at East Jr. High will work throughout the 2016-2017 school year to map a new outline of the course. Due to the fact that this is simply a change in format and delivery, there will be no need for staff assignment changes or professional development in order to implement the curriculum.

E. Resources

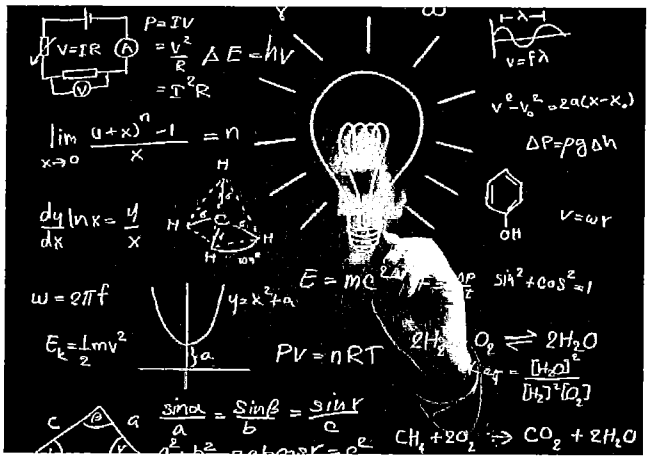
- Curriculum Development Time: A small focus group will need time to condense the current course content so that it can be taught in one trimester. Some curriculum pay may be needed for work done outside of school hours.
- Staff Development Time: None anticipated
- Instructional Materials: No additional materials will be needed. Existing resources will continue to be used.
- Staffing: No additional staff will be needed - 2 sections of Algebra Topics at most
- Space, Equipment, Furniture: No additional space, equipment, or furniture needed

F. Statement of Impact

The proposed changes to Algebra Topics will make it a one-term, half credit math course. It will address the three concerns about the current course which were stated in the rationale. With the change ... (1) A significant number of ninth grade students will no longer fall an entire year behind in math. Struggling students will take Algebra Topics during the first term, which will prepare them for Algebra 1 the following 2 terms. They will no longer need to wait until their sophomore year to take Algebra, keeping them more on track with the rest of their peers. (2) Every effort will be made to keep the number of sections at 2 or less. Students will continue to be selected based on the following academic considerations: Math 8 grade, intervention history, STAR Math scores, and teacher input. (3) Struggling students will now be taking a full year of math in ninth grade instead of having a trimester "off." This will help make their mathematical learning more continuous, better preparing them for future higher-level math courses.

Attachment E

Math Course Proposal



Foundations for Advanced Algebra

Requested by: Cory Moser and Kelly Bluell

A. Request proposed by Cory Moser (secondary mathematics teachers) and Kelly Bluell (secondary math teacher and GT coordinator)

B. Rationale

The proposed **Foundations for Advanced Algebra** course would

- Be a math course option for Grade 11 students at Lincoln High School who have completed Algebra 1 and Geometry.
- Provide a better path to Pre-Calculus in 12th grade providing students the ability to take math for an entire year in 11th grade.
- Offer students with less math abilities in Algebra 1 and/or Geometry to review and refresh on those skills prior to taking Algebra 2 and the ACT leading to more success in both.

C. Communication

Lincoln High School has received feedback from its students (trimester survey) stating that a gap in their math courses has affected their learning in some way. Algebra 2 services a lot of students in that population. Additionally, as a department, we have seen students who have struggled in Algebra 1 and done acceptable in Geometry do poorly in Algebra 2 due to lack of a strong Algebraic foundation and have been communicating that concern over the past 5 years with our administration team, Math CII and CII.

D. Curriculum

The curriculum will be developed by the LHS Mathematics Department and the Math CII and will align with Wisconsin's Standards for Mathematics—both the *Standards for Mathematical Practice* and the Algebra 1 & Algebra 2 Common Core Standards. The curriculum will be guided by the selection of Math Standards recommended in Appendix A of the Standards document.

Topic	*Approximate Percentage*
*Expressions and Equations	20
*Linear Functions & Systems	30
*Quadratic Functions	20
*Other Function Families (Polynomial, Exponential, Log & Rational)	30

These topics combine math content standards from both Algebra 1 and Algebra 2.

The course curriculum will be developed by the LHS Math Department with input from the Math CII during the 2016-17 school year using professional development time, collaboration time, and PLC time. Additional time may be needed in Summer 2017. The LHS Math Department will prepare a course map for inclusion with the district math curriculum map.

Implementation of this course should have no effect on the number of students registering for math in Grade 11.

A plan for registration for the course is being developed. It will include consideration of student math assessment data, student grades, and recommendation from math teacher and counselor.

E. Resources

Curriculum Development Time:

- Professional Development collaboration time
- Secondary Math Department PD meeting time
- PLC meeting time
- Possible summer curriculum-writing time

Staff Development Time

- None anticipated

Instructional Materials:

- No extraordinary new instructional resources are anticipated Existing Algebra 1, Algebra 2 and ACT practice resources will be used as primary resources.

Staffing:

- No additional staff would be needed. No other department should be affected.

Space, Equipment, Furniture:

- No additional space or equipment needed.

F. Statement of Impact

The proposed Foundations for Advanced Algebra course would be a one-term, half credit math course that will better prepare students who will choose to continue with mathematics courses beyond the required courses for graduation. It will create a full-year of mathematics available for students who struggle with the gap in learning due to the trimester. This course will review and revisit core mathematical skills and instruct students on critical curriculum to build a strong foundation for mathematics in upper level courses, ACT and other standardized tests, as well as, for college placement exams. Fewer students will discontinue taking math classes in high school because of poor performance due to gaps in their foundational math skills and conceptual understanding of math topics. By staying in math classes longer, more students leaving high school will be college and career ready in mathematics while being successful in Algebra 2. As stated, this course will also allow students to be more prepared for the ACT and standardized tests. It will keep students from falling a year behind in mathematics due to a multitude of factors that we have seen with students after Geometry and also decrease the number of students taking lower level math courses as seniors. The only course impacts anticipated would be a shift of one math section to accommodate this new course section.

Course Proposal:
"String Orchestra"

Requested by:
Ginger Marten, WRPS Orchestra Teacher

Rationale:

This is actually not a new course proposal. The course already exists, but it is not listed in the LHS Program of Studies. This is a request to make the course official by giving it the title "String Orchestra" in the program of studies.

Since 2013, there have been enough students registering for Symphony Orchestra, to accommodate two separate orchestra classes. The "overflow" students were separated into a 10th grade group and placed in a second orchestra class of about 45 students. Because the majority of the students in this overflow class are 10th graders, it has been referred to as the "Sophomore Orchestra", however, upperclassmen are allowed to enroll in this class if they are unable to take Symphony Orchestra (grades 11-12) due to scheduling conflicts.

I have developed a separate curriculum for the "String Orchestra" that is designed to suit the needs of 10th grade orchestra students. Maintaining a separate orchestra class for sophomores is essential in providing our orchestra students with a "best practice" approach. It is even more important considering that our students in 7th grade music classes no longer meet every day. Next year, our 8th graders will no longer meet every day either. Officially providing a specific standards-based curriculum for our sophomores will attempt to counterbalance the loss of instructional time at the 7th and 8th grade levels and, in essence, maintain the integrity of or current orchestra program.

Communication: Ron Rasmussen, Music CII

Curriculum: See attached for course outline/syllabus

- **Who will write the curriculum and enter it into Build Your Own Curriculum?** Ginger Marten
- **When will the curriculum be developed?** It already exists
- **What schedule or staff assignments may need to be changed?** No schedule change or additional staff necessary.
- **What professional development needs may be necessary to implement the curriculum?** No professional development is necessary.

Resources:

- **Curriculum Development Time**: 0
- **Staff Development Time**: 0
- **Instructional materials**: 0
- **Staffing**: no additional staffing needed
- **Space, Equipment, Furniture**: No additional space, furniture, or equipment needed.

Statement of Impact

For the first time in the history of our district, we have enough string students at LHS to support two orchestras. It is time to make the two classes official, and do what is best for our orchestra students by providing a customized curriculum for our incoming sophomore string players. Again, the course already exists, but is not officially offered in the LHS Program of Studies. I believe the LHS Orchestra program owes its strength to the fact that we have a separate sophomore orchestra with its own student learning targets, and curriculum. We are fortunate to be the 1 of 2 high schools in our conference to have two orchestra classes at this time!

2016-17 LHS String Orchestra Syllabus (Grade 10)

1st Trimester	2nd Trimester	3rd Trimester
September 1st to November 29th	November 30th to March 2nd	March 6th to June 2nd
Student Learning Outcomes:	Student Learning Outcomes:	Student Learning Outcomes:
Music Literacy **Students will gain and apply a basic understanding of music theory.** Vocabulary/Key Concepts: 32nd note, 16th note, 8th note, quarter note, half note, dotted half note, 4/4 time, ¾ time, etc., beat, meter, compound meter, duple meter, compound-duple meter, tempo, rhythm, tonality, sharp, flat, playing a piece in 6/8 time signature.	Music Literacy **Students will continue to gain apply a basic understanding of music theory while focusing on major and minor tonality in two-octave scales.** Vocabulary/Key Concepts: octave, major, minor, leading tone, half step, whole step, sharps, flats, etc.	Music Literacy **Students will compose a short ABA form composition using elements of music theory they continue to discover and implement.** Vocabulary/Key Concepts: Musical form, leading tone, dominant, final cadence, phrase
Technique **Students will play fluently on their instruments in advanced positions (III and V).** Vocabulary/Key Concepts: Shifting, glide finger, fluidity, posture, distribution of weight	Technique **Students will develop and refine vibrato.** Vocabulary/Key Concepts: proper left hand position, balance principle, pivot point, tone, pitch, arm vibrato, wrist vibrato	Technique **Students will learn to perform a wide variety of bowing articulations.** Vocabulary/Key Concepts: Legato, staccato, detache, martele, ricochet, hooked bowings, etc.
Individual Growth **Students will prepare a class B or C solo with guidance from the teacher, individual goal-setting, and practicing on their own.** Vocabulary/Key Concepts: technique, bow hold, left hand position, rubato, structure, musical form, tenuto, articulation, spiccato, staccato, legato, detache, sostenuto, diminuendo, crescendo, bow distribution, straight bow path	Individual Growth **Students will form small ensembles and perform varied repertoire while gaining musical independence.** Vocabulary/Key Concepts: Balance, timbre, intonation, chord, root, structure, tempo, tonality, rubato, articulation, ritardando, vibrato, diminuendo, crescendo, bow distribution	Individual Growth **Students will demonstrate their musical independence by performing in small ensembles for a summative assessment.** Vocabulary/Key Concepts: Balance, timbre, intonation, chord, root, structure, tempo, tonality, rubato, articulation, ritardando, diminuendo, crescendo, bow distribution

Attachment G

Science Course Proposals

LIFE SCIENCES & SOCIETY
PHYSICAL SCIENCES & SOCIETY
FORENSIC SCIENCE

To provide options for students in need of a third science credit to meet new state graduation requirements

PRINCIPLES OF BIOMEDICAL SCIENCE (PLTW)

To provide an advanced course option with the potential to earn college credit in the area of Biological Science

Requested by:

LHS Science Department
David Bergerson
Mary Beth Freeh
Kevin Jorgensen
Terry Krzykowski
Pete Larsen
Craig Ontl
Scott Stankowski

Rationale

In December 2013, Act 63 was signed into law in Wisconsin. This new law increased the required number of science credits from two to three for all Wisconsin high school students. Beginning with the class of 2017 students must earn three credits of science in order to receive a high school diploma. Previous enrollment numbers show that approximately 20% of LHS students did not complete 3 credits of science prior to the new requirement. That means roughly 75 students in each class will need two trimesters of science, or science equivalency, that they were not previously taking.

We have 2 populations of students for whom this is proving to be very challenging. Students with special needs and non-college bound students with little to no interest and/or aptitude in science can struggle to earn the third science credit. CNS-9 and CNS-10 (1 credit each) are currently the only "level one" science courses available to students. The EEN students used to have the option of a pull out science class as one of their science credits however, they are now all mainstreamed into CNS 9 and 10 beginning in 2016-2017. The at-risk population does have LEAP science as an option, however LEAP is designed as a *replacement* to either CNS 9 or 10, not as a supplement or third credit option. In addition, only CNS 9 and 10 are offered during the summer for remedial credit at LHS and CNS 9 is not offered during the school year at LHS. The level two and three science courses have a higher level of rigor and/or require math skills that many of these same students lack. In order to meet the State and District goal of "every child a graduate", the LHS science department, with support of the LHS guidance counselors and administration, is proposing to offer two additional courses that will provide a pathway for students to complete the three credit requirement in Science within the science department in addition to the Science Equivalency Courses already offered in other departments.

1. **Life Sciences and Society - a one trimester 0.5 credit level one course**
2. **Physical Sciences and Society - a one trimester 0.5 credit level one course**

Students with a high interest/aptitude in science also need an additional credit. We are proposing two additional course offerings at a high level of rigor. Project Lead the Way (PLTW) has a four course Biomedical Science curriculum that allows students to explore a range of careers in biomedical sciences as they learn content in the context of real-world, hands-on activities, projects and problems. PLTW courses also provide the potential for students to earn college credit while in high school. We are proposing offering the first course in this curriculum. In addition, we are proposing a Forensic Science Course as well both at "level two" of the science flow chart.

3. **Forensic Science - a one trimester 0.5 credit applied science level two course**
4. **PLTW - Principles of Biomedical Science - a two trimester 1.0 credit academically rigorous course at level two.**

Communication/Timeline

Stakeholders: LHS students & LHS Science teachers

- 2015-16 school year - Initial discussion and student surveys
- Spring 2016 - ideas shared with Science CII, LHS administration & WRPS Director of Curriculum & Instruction
- September/October/November 2016 - proposal shared with Science CII, LHS cabinet, & CII
- December 2016 - proposal to be presented to Board of Education
- February 2017 - Students/parents would be informed of new courses through the Program of Studies and information presented at the time of course registration.

- Spring/Summer 2017 (for courses that "run"): prepare course materials, complete curriculum maps, purchase materials.
- 2017-18 academic year - implementation.

Costs

No additional facilities will be needed for any of these courses.

It is expected that these new courses would be FTE neutral in that they will most likely shift students around within the science department. There may, however, be a shift in FTEs from courses that are science equivalent in other departments but the magnitude of this impact cannot be predicted.

COURSE	CURRICULUM MAPPING		STAFF DEVELOPMENT		MATERIALS/EQUIPMENT	
	TIME	$	TIME	$	ITEMS	$
Life Sciences & Society	20 hours	$ 360.00 +fringes	0	0	none	
Physical Sciences & Society	20 hours	$ 360.00 +fringes	0	0	none	
Forensic Science	20 hours	$ 360.00 +fringes	0	0	Edvotek Module 1: Forensic Science	$ 1,000
BS (PLTW)	10 hours	$ 180.00 +fringes	Required training housing (dbl occ.) Mileage to MSOE Parking	$ 2600 $ 900 $ 180 $ 280 $ 3680	. Durable Equipment: Consumables (first year, expect about $400/year following):	$ 14,700 $ 2,200 $ 16,900
TOTAL	$ 1,630.00 + fringes		$ 3,680.00		$ 17,900.00	

Notes:

PLTW Course:

Additionally, there is a $2000 annual participation fee for the PLTW Biomedical sciences program.

Grant funds will be applied for to offset the cost of PLTW training, but there are no guarantees we will get them.

After the initial purchase of supplies, ongoing supplies will be purchased using money from student lab fees (Science Lab Fees are currently $10 per elective course, this course may need a higher one to fund all consumables).

Science and Society (Physical & Life)

No lab fee.

Statement of Impact

All of our students are now required to earn 3 credits of science in high school. Prior to this requirement, approximately 20% of our students earned only 2 science credits. That means we need to find a way for roughly 75 students in each class to earn another credit of science. These proposed courses will provide options for students who struggle with science content to meet graduation requirements.

For students interested in medical careers, the proposed PLTW course is another route for students to earn another credit in a rigorous program that will help them learn valuable skills and potentially earn college credit while doing so.

In all cases we will be doing our part to ensure all of our students are graduates and leave WRPS as college-ready or career-ready scientifically literate citizens.

It is possible that other courses will have to be cut as a result of students taking these new courses. Some of those may be other science courses if the new ones receive higher enrollment. Others may be outside of science, however the third science credit is a state mandate and not a choice of WRPS.

A final area of impact, which is concerning, is that of science teacher workload. The Department currently has 6.17 FTEs (up 0.17 from 2015-16, and including .50 FTEs of LEAP science). Several teachers already have 3 different classes to prep for per trimester, and at least one has 4, a different class every class period! The addition of more classes adds even more to an already heavy workload. In consideration of this concern, the department may need to consider offering some of our courses during specific trimesters only or alternating years.

Curriculum Outlines:

Each course is described below on a separate page.

Life Sciences and Society:

0.5 Credits; Prereq: successful completion of CNS-9 & CNS-10 ; no lab fees apply

This course is a project-based, non-laboratory class. Students will explore current issues confronting society from a scientific perspective. Emphasis will be placed on critical thinking skills, research, and evidence-based decision making. Topics may include but are not limited to: current advances in biotechnology, food safety, emerging pathogens, global population trends, human health issues, loss of biodiversity others as determined by the instructor. The goal of this class to increase science literacy and empower students to use scientific reasoning and critical thinking skills to gain reliable information, solve problems and make sound decisions in their own lives.

Course Outline

Unit 1: Science: an Overview

- What is Science, both basic and applied, and why should we care?
- What is pseudoscience, bad science, and NOT science?
- How has society influenced science; the influence of religion, politics, racial bias, gender, technology, other forces?
- How has science influenced society?

Unit 2: Research and Analysis of Information

- Where can I find information on science topics?
- How do I analyze a source for reliability?
- How can I effectively evaluate opposing opinions about topics ?

Units 3-5: Life Science Issues (may include but are not limited to):

- advances in biotechnology
- global population trends
- food safety
- Biodiversity loss
- emerging pathogens
- human health issues
- Concentrated Animal Farming Operations
- Others as chosen by the teacher or of timely manner

If this course offering is approved and enrollment numbers are sufficient for the class to run, the course teacher will be identified based on next year's schedule and areas of teacher certification. This teacher will map the curriculum during the summer of 2017. No additional professional development or supplies will be required for this course.

Physical Sciences and Society:

0.5 Credits; Prereq: successful completion of CNS-9 & CNS-10; no lab fees apply

This course is a project-based, non-laboratory class. . Students will explore current issues confronting society from a scientific perspective. Emphasis will be placed on critical thinking skills, research, and evidence-based decision making. Topics may include but are not limited to: water & air quality, depletion of resources, global climate change, exploring space, meeting energy needs, nanotechnology and others as determined by the teacher. The goal of this class to increase science literacy and empower students to use scientific reasoning and critical thinking skills to gain reliable information, solve problems and make sound decisions in their own lives.

Course Outline

Course Outline

Unit 1: Science: an Overview

- What is Science, both basic and applied, and why should we care?
- What is pseudoscience, bad science, and NOT science?
- How has society influenced science; the influence of religion, politics, racial bias, gender, technology, other forces?
- How has science influenced society?

Unit 2: Research and Analysis of Information

- Where can I find information on science topics?
- How do I analyze a source for reliability?
- How can I effectively evaluate opposing opinions about topics ?

Units 3-5: Physical science issues (may include but are not limited to):

- space exploration
- water & air quality
- depletion of resources
- global climate change
- energy needs
- artificial intelligence
- Nanotechnology
- Others as chosen by the teacher or of timely manner

If this course offering is approved and enrollment numbers are sufficient for the class to run, the course teacher will be identified based on next year's schedule and areas of teacher certification. This teacher will map the curriculum during the summer of 2017.

No additional professional development or supplies will be required for this course.

Forensic Science

0.5 Credits; successful completion of CNS 9 & 10; $10.00 lab fee applies

Forensic Science is the application of science and technology within the legal system. This course will introduce students to the scientific principles and techniques used to observe, collect, analyze and evaluate evidence found at crime scenes. Students will investigate the use of toxicology, ballistics, DNA analysis, fingerprint and trace evidence interpretation, hair and fiber analysis, forensic entomology and autopsy in solving crimes. Class work will include lecture, written exercises, lab work and projects to teach critical thinking skills as students investigate and solve problems and apply information.

Course Outline:

- Introduction to Forensic Science
- Deductive Reasoning
- The crime scene
- Analysis of Physical Evidence; topics may include but are not limited to:
    - Serology/Spatter
    - Hair/Fiber Analysis
    - Handwriting Analysis
    - Fingerprints
    - Time of Death/including Forensic Entomology
    - Odontology/Impressions
    - Anthropology (Bones)
    - Ballistics & firearms
    - DNA
    - Toxicology
    - Arson, fire & explosives
    - Other : Glass, soil, paint, etc.
- Case Study

If this course offering is approved and enrollment numbers are sufficient for the class to run, the course teacher will be identified based on next year's schedule and areas of teacher certification. This teacher will map the curriculum and purchase necessary supplies during the summer of 2017.

Principles of Biomedical Sciences (PLTW)

1.0 credit; 2 trimesters; prereq: CNS-9 & 10; lab fee applies (amount?)

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that have led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

Unit One: Human Body Systems
- Structure and function of human body systems and how the systems interact
- healthcare laws and ethical standards (HIPPA)
- information evaluation and citations
- careers in healthcare

Unit Two: Heart Attack
- Build a pump
- Heart structure and function
- Heart rate, EKG, blood pressure and factors that affect them
- Blood composition, production, and function

Unit Three: Diabetes
- Food labels & nutrition
- Food macromolecules, chemical bonds, reactions, energy/calorimetry
- Glucose, insulin & diabetes

Unit Four: Sickle Cell Disease
- Hemoglobin & structural changes that affect function
- DNA, Inheritance of traits & genetic diseases
- Gene mutations, chromosome abnormalities & karyotyping

Unit Five: Hypercholesterolemia
- Lipid chemistry & cholesterol
- Central Dogma and protein chemistry
- Diagnostic techniques: PCR, RFLPs, karyotyping

Unit Six: Infectious Diseases
- Bacterial classification, staining, microscopy, and antibiotic susceptibility
- Viruses, viral disease and treatment
- Transmission and prevention of infectious disease
- Public education and awareness campaign production

Unit Seven: Medical Interventions
- Medical interventions to prevent disease and treat disease
- Engineering & technology in medicine

Unit Eight: Grant Proposal
- The need for medical research and funding of medical research through the grant process
- Grant proposal preparation

A more detailed course outline can be found at: http://www.pccsk12.com/home/showdocument?id=1733

If this course offering is approved and enrollment numbers are sufficient for the class to run, Mary Beth Freeh will attend training, map the curriculum and purchase necessary supplies during the summer of 2017. We would expect that WRPS would pay for the expenses associated with training (travel/housing) that is required by PLTW for teacher certification as well as the annual program participation fee. The cost for non-capital expenditures for required lab equipment has not yet been determined.

Attachment H

Modified/New Course Proposal

Contemporary Issues

Contemporary Issues will be offered as a 0.5 elective social studies credit
Contemporary Issues will also fulfill the Global Citizenship requirement

Requested by:
Social Studies Department

Explanations and Rationale:

Since moving to the trimester, our American History and World History courses are not able to do an adequate job of covering current events. This course is being proposed to cover that gap. This class will allow students to explore current issues in more depth. Students will explore social, political, environmental, and economic issues of both the United States and the world. Students will be active participants in the course from helping to plan the curriculum topics (with teacher discretion) to designing the projects students will be asked to complete. Possible topics that could be covered during the term include terrorism, current global conflicts, national debt, trade agreements, deforestation, civil rights of minority groups, ozone depletion, immigration, etc. Much of the learning in this class would be project based.

This course would be open to all juniors and seniors.

Communication/Timeline

Spring 2016: Course idea shared with LHS Social Studies department
September 2016: Course idea shared with Social Studies CII sub-committee
September 2016: Proposal shared with LHS Social Studies department and administration
October 2016: Proposal shared with CII
Fall 2017:First sections of course will run.

Curriculum

The curriculum is not fully designed yet but would follow an outline similar to the one below:

Unit 1

Major social concerns in the United States

Unit 2

Political Issues in the United States

A.) U.S. Foreign Policy concerns

-Enemies and/or allies?

B.) U.S. Domestic Policy concerns

- National budget

Unit 3

Economic Issues

A.) Why are some countries rich while others are not?

B.) Trade policies/ Immigration

- Good for the world?
- Good for the U.S.?

Unit 4

Environmental Issues

A.) What are the largest environmental concerns in the U.S?

B.) What are the largest environmental concerns in the world?

C.) Trade – offs between environment and economics

Unit 5

Activism

What can you do? How to become an activist?

Resources

STAFFING: Our expectation is that students will move from other social studies courses to this one. We do not anticipate any increase in FTE's

SPACE, EQUIPMENT, FURNITURE: no additional needed

PROFESSIONAL DEVELOPMENT: Teachers in the department will need time to build the curriculum

INSTRUCTIONAL MATERIALS: Since it is a current events class, the instructor would use existing technology to support the instruction of the course.

Evaluation

Student success in this course will be evaluated at the end of the course. Any modifications can then be made for the following year.

Student and teacher satisfaction with the course will be evaluated at the end of the first year of implementation.

Evaluation will be conducted by the LHS Social Studies Department and administration, and shared with the Social Studies CII.

Summary/Statement of Impact

The course will have minimal, if any, financial impact on the district.
There is no expectation of a negative impact on other students or courses.

Attachment I

Modified/New Course Proposal

Introduction to Economics

Principles of Economics will be offered as a 0.5 elective social studies credit

Requested by:
Social Studies Department

Explanations and Rationale:

Students are currently required to take .5 credits of American Government in 9th grade. The Social Studies Department would like to propose offering You and the Economy to 9th grade students at East Junior High. This course would address the economic strand of the WI Social Studies Standards, an area we believe to be under addressed in our current curriculum. Furthermore, with an extra elective credit available to students as a result of the move to the trimester schedule, students with a special interest in social studies will have additional opportunities. Students who take the course will not be eligible to take Principles of Economics, an elective offered to 11th and 12th graders, but can take AP Macro Economics.

Communication/Timeline

Spring 2016: Course idea shared with LHS Social Studies department
October 2016: Proposal shared with LHS Social Studies department and administration
October 2016: Course shared and approved by Social Studies CII Sub Committee
October 2016: Proposal shared with CII
Fall 2017:First sections of course will run.

Curriculum

Unit 1 - Basic Economic Concepts
(economic systems, supply and demand, cost benefit analysis, etc.)
Unit 2 - Labor
(What determines pay?)
Unit 3 - Consumer Behavior/ Financial Literacy
(budgeting, credit, savings, etc.)
Unit 4 - Producers/ Business and Market Structures
(monopoly, competition, organizing a business, etc.)
Unit 5 - Role of Government
(How much government is necessary in the economy?)
Unit 6 - Global Trade
(free trade versus trade barriers)

Resources

STAFFING: Our expectation is that students will move from other social studies courses to this one. We do not anticipate any increase in FTE's

SPACE, EQUIPMENT, FURNITURE: no additional needed

PROFESSIONAL DEVELOPMENT: Teachers in the department will need time to build the curriculum

INSTRUCTIONAL MATERIALS: No additional materials needed.

Evaluation

Student success in this course will be evaluated at the end of the course. Any modifications can then be made for the following year.

Student and teacher satisfaction with the course will be evaluated at the end of the first year of implementation.

Evaluation will be conducted by the LHS Social Studies Department and administration, and shared with the Social Studies CII.

Summary/Statement of Impact

The course will have minimal, if any, financial impact on the district.
There is no expectation of a negative impact on other students or courses.