Exhibit EE

BALTIMORE COUNTY PUBLIC SCHOOLS

DATE: January 13, 2009

TO: **BOARD OF EDUCATION**

FROM: Dr. Joe A. Hairston, Superintendent

SUBJECT: **CONSIDERATION OF CURRICULUM**

ORIGINATOR: Patricia E. Abernethy, Chief Academic Officer

RESOURCE PERSON(S): Jonathan D. Brown, Associate Superintendent, Curriculum and Instruction

RECOMMENDATION

That the Board of Education reviews and approves the following new/revised curriculum:

Mathematics
- Kindergarten Math
- Grade 1 Math
- Grade 2 Math
- Grade 3 Math
- Grade 4 Math
- Grade 5 Math
- Grade 6 Math
- Sets Functions Probability
- College Readiness
- College Algebra
- Trigonometry

Science
- Earth Science
- Physics

World Languages
- Chinese
- French
- Spanish

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Baltimore County Public Schools

Curriculum Board Approval

Course Description	Course	BCPS Rating
MATHEMATICS PREK-12		
MATH KINDERGARTEN	N/A	15
MATH 1	520100	15
MATH 2	520200	15
MATH 3	520300	15
MATH 3 GT	520305	15
MATH 4	520400	15
MATH 4 GT	520405	15
MATH 5	520500	15
MATH 6	2006000	15
COLLEGE ALGEBRA: GT	2028205	15
COLLEGE ALGEBRA: HONORS	2028004	15
COLL READI MATH	2025000	15
SET FUNC & PROBABLTY	2023500	15
TRIG W/AN GEOM. GT	2040105	15
TRIG W/AN GEOM. HON	2040104	15
TRIGONOMETRY : HONORS	2040004	15
SCIENCE PREK-12		
EARTH/SPACE SCIENCE	2565100	15
EARTH/SPACE SCI: HONORS	2565104	15
EARTH/SPACE SCI: MAG	2565205	15
EARTH/SPACE SCI: REV	2565109	15
EARTH/SPACE SCI: MAG	2508600	15
ENV. SCI: G/T 8	2508005	15
PHYSICS	2512000	15
PHYSICS: HONORS	2512004	15
PHYSICS: REV	2512009	15
WORLD LANGUAGES		
CHINESE I	3080100	14
CHINESE IA MIDDLE SCHOOL	3008100	14
CHINESE IB MIDDLE SCHOOL	3008200	14
FRENCH I	3020100	15

Curriculum Board Approval

Course Description	Course	BCPS Rating
FRENCH I MIDDLE SCHOOL	3002600	15
FRENCH I EVENING/SUMMER	3020109	15
FRENCH I MAGNET MIDDLE SCHOOL (GRADE 6)	3002100	15
FRENCH IA MIDDLE SCHOOL (GRADE 7)	3002700	15
FRENCH IB MIDDLE SCHOOL (GRADE 8)	3002800	15
SPANISH I (GRADES 7-12)	3030100	15
SPANISH I EVENING/SUMMER	3030109	15
SPANISH I MAGNET MIDDLE SCHOOL (GRADE 6)	3003100	15
SPANISH I MIDDLE SCHOOL	3003600	15
SPANISH IA (GRADE 7)	3003700	15
SPANISH I B (GRADE 8)	3003800	15

EXECUTIVE SUMMARY
Mathematics PreK-12 Curricula
January 13, 2009

Mathematics PreK-12 encompasses 42 curriculum guides reflective of 66 mathematics courses currently taught in Baltimore County Public Schools. Throughout the spring and summer of 2008, eleven guides have been developed or revised following an evaluation rubric. At this time, the Office of Mathematics PreK-12 is seeking approval for the following curriculum guides – Mathematics Kindergarten; Mathematics Grade 1; Mathematics Grade 2; one guide for Mathematics Grade 3 and Gifted and Talented Mathematics Grade 3; Mathematics Grade 4; one guide for Gifted and Talented Mathematics Grade 4 and Mathematics Grade 5; Mathematics Grade 6; one guide for Gifted and Talented College Algebra and Honors College Algebra; College Readiness Mathematics; Sets Functions and Probability; and one guide for Gifted and Talented Trigonometry with Analytic Geometry, Honors Trigonometry with Analytic Geometry, and Honors Trigonometry – with the understanding that all development and revisions of these guides reflects an alignment of the written, taught, and assessed curriculum, an expectation that leads to a high-quality mathematics program for all students.

Curriculum personnel from the Office of Mathematics PreK-12 worked with content area study committees and curriculum writers to carefully develop and review each curriculum guide to determine the areas that need to be strengthened and/or supplemented. Those findings guided the curriculum development, revisions, and improvements to the eleven guides being submitted for approval. Alignment of these curriculum guides to the Maryland Voluntary State Curriculum, High School Core Learning Goals, and National Council of Teachers of Mathematics Standards has been carefully checked and reconfirmed. Each guide fully and completely incorporates the elements described in the rubric – Clarity and Specificity of Objectives; Congruity of the Curriculum to the Assessment Process; Delineation of Prerequisite Essential Skills, Knowledge, and Attitudes; Delineation of the Major Instructional Resources; and Clear Approaches for Classroom Use (Strategies). Following the criteria of the rubric, the guides each present cumulative scores of 15 out of a possible 15 points.

The curriculum guides for Mathematics Kindergarten, Mathematics Grade 1, Mathematics Grade 2, Mathematics Grade 3, Mathematics Grade 4, Mathematics Grade 5, and Mathematics Grade 6 are differentiated for use in the respective grades. The curriculum guides for G/T Mathematics Grade 3 and G/T Mathematics Grade 4 are included as part of the Mathematics Grade 3 and the Mathematics Grade 5 curriculum guides respectively and are differentiated for gifted and talented students. The curriculum guide for College Algebra is differentiated for use in two courses – Honors College Algebra and G/T College Algebra. The curriculum guides for Trigonometry with Analytic Geometry is differentiated for use in three courses Honors Trigonometry with Analytic Geometry, G/T Trigonometry with Analytic Geometry, and Honors Trigonometry. The curriculum guides for College Readiness Mathematics and Sets, Functions, and Probability are differentiated for use in Grades 11 and 12.

The curriculum guide for each course describes the instructional path needed to progress from the standards and objectives of the course towards the target assessments created as part of the curriculum guide. Each guide includes the portion of the scope and sequence for PreK-12 mathematics that includes the grade/course before, the course itself, and the grade/course after in

order for teachers to see the path of instruction and the importance of the current course objectives in the schema of mathematics. Additionally, Articulated Instruction Module (A.I.M.) provide a lens through which to view for alignment of the written, taught, and assessed curriculum in BCPS with the Maryland Voluntary State Curriculum, High School Core Learning Goals, and National Mathematics Standards. Each curriculum is designed to be an integral part of the PreK-12 mathematics program to help students meet Baltimore County standards and performance goals as outlined in the BCPS *Blueprint for Progress*. These curricula are designed to help students become confident mathematicians who understand mathematics, are effective problem solvers, can reason mathematically, and can communicate their understanding of mathematical concepts.

EXECUTIVE SUMMARY
PreK-12 Science Curriculum
January 13, 2009

PreK-12 Science encompasses 46 separate curriculum guides reflective of 88 science courses currently taught in Baltimore County Public Schools. Last spring, 38 of those 46 curriculum guides were approved by the Board of Education. Throughout the spring and summer of 2008, three more curriculum guides have been revised following an evaluation rubric. At this time, the Office of Science PreK-12 is seeking approval by the Board of Education for two revised curriculum guides – High School Physics and High School Earth/Space Science – with the understanding that all future revisions of these guides will continue to reflect alignment of the written, taught, and assessed curriculum, an expectation of Baltimore County schools that leads to a high-quality program for all students.

Curriculum personnel from the Office of Science PreK-12 worked with content area study committees and curriculum writers to carefully review each curriculum guide to determine the areas that need to be strengthened and/or supplemented. Those findings guided the curriculum revisions and improvements to the three guides being submitted for approval. Alignment of these curriculum guides to the Maryland Voluntary State Curriculum or High School Core Learning Goals and National Science Education Standards has been carefully checked and reconfirmed. Each guide fully and completely incorporates the elements described in the rubric – Clarity and Specificity of Objectives; Congruity of the Curriculum to the Assessment Process; Delineation of Prerequisite Essential Skills, Knowledge, and Attitudes; Delineation of the Major Instructional Resources; and Clear Approaches for Classroom Use (Strategies). Following the criteria of the rubric, the revised guides each present cumulative scores of 15 out of a possible 15 points.

The curriculum guide for Earth/Space Science is differentiated for use in five different courses – standard earth/space science, honors earth/space science, magnet earth/space science, earth/space science review, and earth/space science for the specialized magnet program in Grades 6 through 8 at the magnet middle schools. The curriculum guide for High School Physics is differentiated for use in standard physics, honors physics, and physics review.

Each curriculum contains a portion of the science scope and sequence that identifies the content and skill indicators students have learned in the previous grade or course, those addressed in the current grade or course, and those that will be encountered in a subsequent grade or course. The scope and sequence is provided so that teachers understand the path of instruction and the place and importance of the current course objectives within the bigger picture of science as a body of knowledge. Additionally, Articulated Instruction Modules (A.I.M.) provide a lens through which to view alignment of the written, taught, and assessed curriculum in BCPS with the Maryland Voluntary State Curriculum and the High School Core Learning Goals.

Each curriculum guide provides the teacher with the framework and resources necessary to plan and implement that particular science program. Each curriculum is also designed to be an integral part of the PreK-12 science program to help students meet Baltimore County standards and performance goals as outlined in the BCPS *Blueprint for Progress*. Each science curriculum presents science in an engaging, hands-on, minds-on approach that is relevant to today and

places learning in a real-world setting. Science instruction is designed to help students think and act like scientists and to approach problems and new situations confidently. These curricula are designed to capture the students' inherent curiosity, to relate natural phenomena to the world in which they live, to engage students in the hands-on doing of real science, and to help students develop problem solving skills and communicate their understanding of scientific concepts clearly, confidently, and effectively.

EXECUTIVE SUMMARY
World Languages
January 13, 2009

The Office of World Languages consists of two unique content areas, ESOL and World Languages Other Than English (LOTE). ESOL encompasses ten separate curriculum guides reflective of 14 courses, while LOTE encompasses 39 separate curriculum guides reflective of 92 courses currently taught in Baltimore County Public Schools. Some curriculum guides correspond to a single course, while others are utilized in multiple related courses. The curriculum guide for Spanish I is differentiated for use in six courses: Spanish I A and Spanish I B for middle schools, Spanish I middle school, Spanish I magnet middle school, Spanish I high school, and Spanish I for evening and summer school. The curriculum guide for French I is also differentiated for use in six courses: French I, French I middle school, French I evening and summer school, French I magnet middle school, French IA and Spanish IB for middle schools. The Chinese I curriculum is differentiated for use in three courses: Chinese I, Chinese IA and Chinese IB for middle schools.

Every curriculum guide contains a portion of the world languages scope and sequence that identifies the content and skill indicators students have learned in the previous level or course, those addressed in the current level or course, and those that will be encountered in a subsequent level or course. This is provided so that teachers understand the path of instruction and the place and importance of the current course objectives within the big picture of second language acquisition. Articulated Instruction Modules (A.I.M.) for every level or course provide a lens through which to view alignment of the written, taught, and assessed curriculum in BCPS with the Maryland Voluntary State Curriculum (VSC) for English Language Proficiency or the Maryland Voluntary State Curriculum (VSC) for Foreign Languages. The ACTFL National Standards center around five goals: Communication, Cultures, Connections, Comparisons, and Communities. National Standards for Foreign Language Learning in the 21st Century call for programs that produce students who are both linguistically and culturally proficient, who know "how, when, and why, to say what to whom." The Maryland Voluntary State Curriculum (VSC) is based upon the National Standards. Baltimore County curriculum writers carefully considered each national goal and the Maryland Voluntary State Curriculum (VSC) and included skills and activities to address all goals in every unit.

In general, listening, speaking, reading, and writing skills are introduced in the beginning levels of ESOL or LOTE when students use memorized phrases and vocabulary about familiar topics to communicate. Skills are further developed in intermediate levels so that students can create more language using more complex grammatical structures about a wider variety of topics. In advanced levels, students access new content using complex vocabulary and grammatical structures to solve problems and communicate with native speakers in a variety of contexts.

Curriculum guides vary depending on the language being addressed; however, each guide provides the teacher with the framework and resources necessary to plan and implement that particular language program. Every LOTE curriculum is designed to be an integral part of the sequential language program leading to the Advanced Placement Test and proficiency in a second language.

The Office of World Languages is seeking approval of Spanish I, French I, and Chinese I curriculum guides with the understanding that all future revisions of these guides will continue to reflect alignment of the written, taught, and assessed curriculum, an expectation of Baltimore County schools that leads to a high-quality program for all students.