



BALDWIN-WHITEHALL SCHOOL DISTRICT

2016-2017 Curriculum Update

September 7, 2016

Curriculum Renewal Cycle & Review Process

**BALDWIN-WHITEHALL SCHOOL DISTRICT
REVISED CURRICULUM RENEWAL CYCLE AND REVIEW PROCESS**

Stages	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Readiness/Preparation - PA Core Standards - Keystone End-of-Course Exams - Program Evaluation - Curriculum Writing (Budget) - Best Practices - Material Selection - Implementation Timeline - Integration of Technology	Math (6-12)	Math (K-5) Fine/ Practical Arts (K-12)	English (K-12)	Science (6-12) World Language (6-12)	Science (K-5) P.E/ Health (K-12)	Social Studies (K-12)
Implementation - ***Material Purchasing (Budget) - Curriculum Mapping and Revisions (Horizontal & Vertical) - Instructional Strategies - Common Assessments & SLO's - Integration of Technology	*Science (6-8/ Biology)	Math (6-12)	Math (K-5) Fine/ Practical Arts (K-12)	English (K-12)	Science (6-12) World Language (6-12)	Science (K-5) P.E/ Health (K-12)
Monitoring 1 - Mid-Point Curriculum Review - Instructional Strategies - Develop Additional Common Assessments & SLO's - Data and System Analysis - Integration of Technology	Science (K-5) P.E/ Health (K-12)	Social Studies (K-12)	Math (6-12)	Math (K-5) Fine/ Practical Arts (K-12)	English (K-12)	Science (6-12) World Language (6-12)
Monitoring 2 - Data and System Analysis - Evaluate and Refine Common Assessments & SLO's - Develop Additional Resources - Integration of Technology	Science (6-12) World Language (6-12)	Science (K-5) P.E/ Health (K-12)	Social Studies (K-12)	Math (6-12)	Math (K-5) Fine/ Practical Arts (K-12)	English (K-12)
Monitoring 3 - Evaluate Common Assessments & SLO's - Develop Additional Resources - Integration of Technology	English (K-12)	Science (6-12) World Language (6-12)	Science (K-5) P.E/ Health (K-12)	Social Studies (K-12)	Math (6-12)	Math (K-5) Fine/ Practical Arts (K-12)
Comprehensive Analysis & Preparation - Realign with Current National and State Practices/Initiatives - Integration of Technology - Needs Assessment	Math (K-5) Fine/ Practical Arts (K-12)	English (K-12)	Science (6-12) World Language (6-12)	Science (K-5) P.E/ Health (K-12)	Social Studies (K-12)	Math (6-12)

***ESL, Special Education, Gifted, and RTII will be included with Math, Science, English, and Language Arts/Reading.

***Guidance and Social Workers will be included with Social Studies.

***The research, implementation & evaluation of technology will be embedded in each stage of the

***Material purchasing includes textbooks, supplemental materials, and software.



Mathematics (K-12)

Secondary (Grades 6-12)

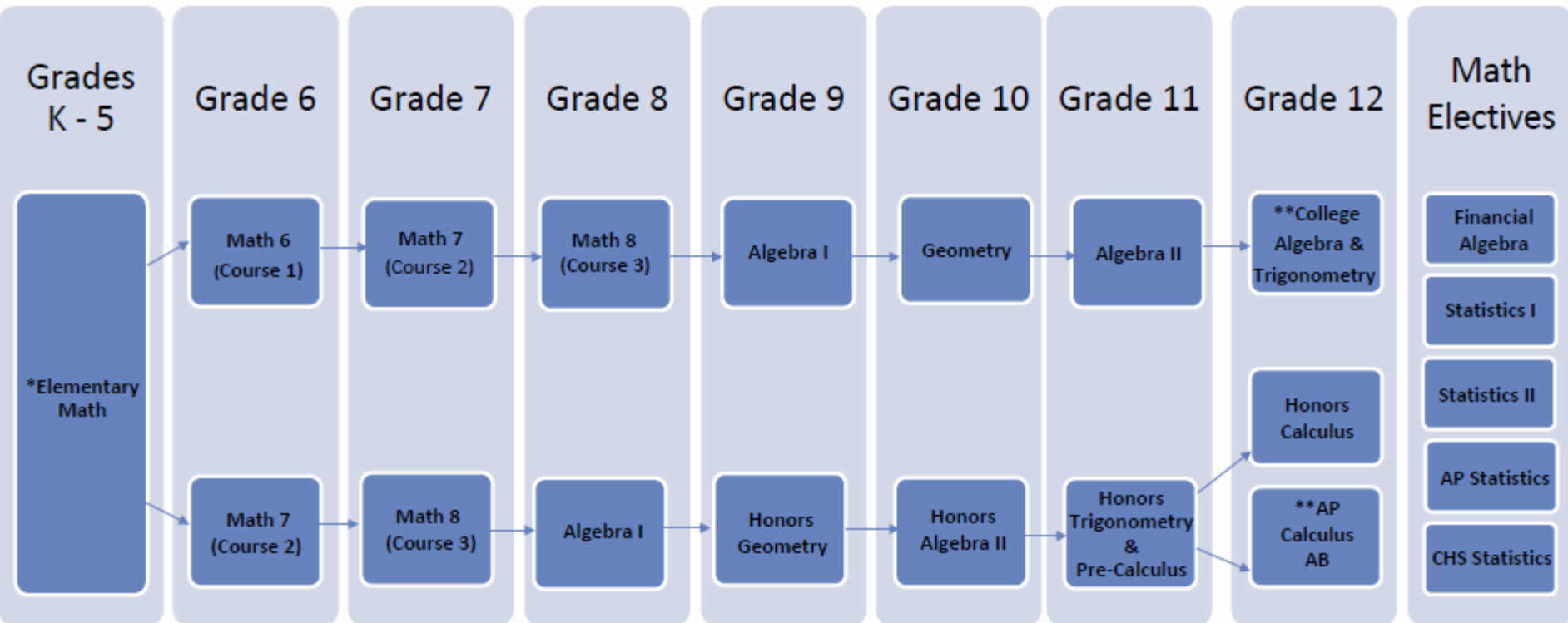
- The 2016-2017 school year will mark year three of implementation of the revised curriculum
 - Aligned to the Pennsylvania (PA) Core Standards and Keystone Eligible Content
- ALEKS is utilized for intervention in the following courses:
 - Algebra I (BHS)
 - Grades Six through Eight 96-Minute Period (HMS)

Elementary (Grades K-5)

- The 2016-2017 school year will mark year two of implementation of the revised curriculum
 - Aligned to the Pennsylvania (PA) Core Standards
- EnVision 2.0
 - Provides intervention and enrichment for all students



K-12 Mathematics Flow Chart



Graduation Requirement = 3 credits of Math

*Elementary Math students may be eligible to accelerate one grade level by meeting the following criteria: Scoring a 93% or better on current grade-level final assessment, Scoring a 90% or better on the recommended 'skipped' grade level, Scoring Advanced on the PSSAs, and Achieving advanced grades in Mathematics in all 4 nine-week marking periods.

**Suggested 4th year math course.

Major K-8 Math Category Shifts

PA Core Standards	PA Standards
Counting and Cardinality	2.1. Numbers, Number Systems and Number Relationships 2.2. Computation and Estimation
Operations and Algebraic Thinking	
Ratios and Proportional Relationships	
The Number System	
Number and Operations in Base Ten	
Number and Operations—Fractions	2.3. Measurement and Estimation 2.6. Statistics and Data Analysis 2.7. Probability and Predictions
Measurement and Data	
Statistics and Probability	
Expressions and Equations	2.8. Algebra and Functions 2.11. Concepts of Calculus
Functions	
Geometry	2.9. Geometry 2.10. Trigonometry
Mathematical Practices	2.4. Mathematical Reasoning and Connections 2.5. Mathematical Problem Solving and Communication



pennsylvania
DEPARTMENT OF EDUCATION

Grades 6-8 Cluster Matrix



PDE - Common Core Mathematics Standards – Cluster Heading Matrix



Trifold – Grades 6-8

Domain	Grade 6	Grade 7	Grade 8
Counting and Cardinality			
Operations and Algebraic Thinking			
Number and Operations in Base Ten			
Number and Operations—Fractions			
Measurement and Data			
Ratios and Proportional Relationships	<ul style="list-style-type: none"> Understand ratio concepts and use ratio reasoning to solve problems. 	<ul style="list-style-type: none"> Analyze proportional relationships and use them to solve real-world and mathematical problems. 	
The Number System	<ul style="list-style-type: none"> Apply and extend previous understandings of multiplication and division to divide fractions by fractions. Apply and extend previous understandings of numbers to the system of rational numbers. 	<ul style="list-style-type: none"> Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. 	<ul style="list-style-type: none"> Know that there are numbers that are not rational, and approximate them by rational numbers.
Expressions and Equations	<ul style="list-style-type: none"> Apply and extend previous understandings of arithmetic to algebraic expressions. Reason about and solve one-variable equations and inequalities. Represent and analyze quantitative relationships between dependent and independent variables. 	<ul style="list-style-type: none"> Use properties of operations to generate equivalent expressions. Solve real-life and mathematical problems using numerical and algebraic expressions and equations. 	<ul style="list-style-type: none"> Work with radicals and integer exponents. Understand the connections between proportional relationships, lines, and linear equations. Analyze and solve linear equations and pairs of simultaneous linear equations.
Functions			<ul style="list-style-type: none"> Define, evaluate, and compare functions. Use functions to model relationships between quantities.
Geometry	<ul style="list-style-type: none"> Solve real-world and mathematical problems involving area, surface area, and volume. 	<ul style="list-style-type: none"> Draw, construct and describe geometrical figures and describe the relationships between them. Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. 	<ul style="list-style-type: none"> Understand congruence and similarity using physical models, transparencies, or geometry software. Understand and apply the Pythagorean Theorem. Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.
Statistics and Probability	<ul style="list-style-type: none"> Develop understanding of statistical variability. Summarize and describe distribution. 	<ul style="list-style-type: none"> Use random sampling to draw inferences about a population Draw informal comparative inferences about two populations. Investigate chance processes and develop, use, and evaluate probability models. 	<ul style="list-style-type: none"> Investigate patterns of association in bivariate data.

Major 9-12 Math Category Shifts



pennsylvania
DEPARTMENT OF EDUCATION

PA Core Standards	PA Standards
Number and Quantity	2.1. Numbers, Number Systems and Number Relationships 2.2. Computation and Estimation
Algebra	2.8. Algebra and Functions
Functions	2.11. Concepts of Calculus
Geometry	2.9. Geometry 2.10. Trigonometry
Statistics and Probability	2.6. Statistics and Data Analysis 2.7. Probability and Predictions
Modeling	2.4. Mathematical Reasoning and Connections
Mathematical Practices	2.5. Mathematical Problem Solving and Communication

Sample Grade 3 Math Unit



Baldwin-Whitehall School District
UNIT OF INSTRUCTION OVERVIEW

General Course Information

Course Title:	3rd Grade Mathematics	Course Code:	
Pre-requisites:	2nd Grade Mathematics	Time Allocated Per Unit: <i>(Based on 165 days of instruction)</i>	Approx. 8-13 days
Authors:	Dianna Wispolis, Rebecca Wolf	Last Updated:	6-28-2016
Reviewed by:		Date Entered:	

Course Description

- *What information would accurately and articulately describe what students will know and be able to do as a result of this course?*
 - Is the description worded in such a way that it is engaging and interesting to both students and parents?
 - Does the description provide the essential skills and competencies that students will be able to demonstrate upon successful completion of the course?
 - Does the description mention the duration of the course?
 - Does the description use the title of the course within it?
 - Does the description specifically communicate expectations of students?

3rd Grade Mathematics will focus on the 5 domains outlined in the PA Core Standards:

- Operations and Algebraic Thinking
- Number and Operations in Base Ten
- Number and Operations Fractions
- Measurement and Data
- Geometry

Unit Title 1	Topic 1: Understand Multiplication and Division of Whole Numbers	Instructional Days Needed	10
-------------------------------	---	----------------------------------	-----------

Competencies/Academic Standards

- *What relevant goals (e.g., content standards, course or program objectives, learning outcomes) will this design address?*
 - Select specific standards or assessment anchors that address the core of instruction.
 - Use Common Core, PA Academic Standards, Keystone Assessment Anchors, etc., as appropriate.

CC.2.2.3.A.1: Represent and solve problems involving multiplication and division.

- **M03-R-O.1.1.1:** Interpret and/or describe products of whole numbers (up to and including 10×10). Example 1: Interpret 25 as the total number of objects in 5 groups each containing 5 objects. Example 2: Describe a context in which a total number of objects can be expressed as 5×7 .
- **M03-R-O.1.2.1:** Use multiplication to represent and including 10×10 and use division (limit dividends through 10 and limit divisors and quotients through 10) to solve word problems in situations involving equal groups, arrays, and



English Language Arts (K-12)

- 2016-2017 is the first year of implementation
- The curriculum is newly aligned to the Pennsylvania (PA) Core Standards and Keystone Eligible Content
- K-12 curriculum is written in Text Sets. Text Sets include the following:
 - Anchor Text
 - Non-Negotiable Text(s)
 - Multi- Genre (Fiction, Non-Fiction, Poetry, Short Stories, etc.)
 - Thematic Units (Example: Overcoming Obstacles)

Sample ELA PA Core Standards Transition Guide

GRADE 1 PA CORE STANDARDS TRANSITION GUIDE *

CONTINUED EMPHASIS	SPECIFIC PA CORE EMPHASIS
Comprehension Skills (Fiction and Non-Fiction)	<ul style="list-style-type: none"> Increasing reading of non-fiction texts (goal of 50% @ end of Grade 4) (PACC Introduction, Pg. 2) Identifying and using text features (CC.1.1.1.B) Identifying words and phrases in text that suggest feelings or appeal to senses (CC.1.3.1.F.) Comparing/contrasting characters and experiences within and between texts (CC.1.3.1.H) Focusing on similarities and differences between texts (CC.1.2.1.I)
Vocabulary Development	<ul style="list-style-type: none"> Emphasizing inflections, affixes, root words, and conjunctions (CC.1.1.1.D) Using words and phrases acquired through conversations, reading and being read to, and by responding to texts (CC.1.2.1.J, CC.1.3.1.J) Exploring word relationships and nuances of words (CC.1.3.1.J)
Word Recognition Skills Decoding Skills	<ul style="list-style-type: none"> Focusing on specific phonetic skills (CC.1.1.1.C) (CC.1.1.1.D) (CC.1.4.1.F) (CC.1.4.1.R) Focusing on spelling sound correspondences for common consonant digraphs; decoding regular one and two-syllable words, final e and common long vowel teams, and inflectional endings (CC.1.1.1.C, CC.1.1.1.D.) Using multiple strategies to decode unknown words (e.g., context clues, rereading, phonics) (CC.1.3.1.I)
Fluency	<ul style="list-style-type: none"> Connecting fluency explicitly to comprehension (CC.1.1.1.E) Developing fluency for accuracy, expression, and rate (CC.1.1.1.E)
Types of Writing Quality of Writing	<ul style="list-style-type: none"> Writing every day in response to learning (CC.1.4.1.X) Writing opinion pieces (CC.1.4.1.G-I) Employing peer review in the revising process (CC.1.4.1.T) Using technology tools/digital resources to publish writing (CC.1.4.1.U)
Research	<ul style="list-style-type: none"> Participating in shared research, oral presentations and writing projects (CC.1.4.1.V)
Speaking and Listening	<ul style="list-style-type: none"> Participating in frequent collaborative discussions with diverse partners (CC.1.4.1.T) (CC.1.5.1.A)
Conventions of Standard English	<ul style="list-style-type: none"> Foundational grammar should be taught in the context of reading, writing, and speaking (CC.1.4.1.F) (CC.1.4.1.L) (CC.1.4.1.R) (CC.1.5.1.G) Using common and proper nouns (possessives, singular and plural nouns, pronouns) (CC.1.4.1.L) (CC.1.4.1.R) Using conjunctions (CC.1.4.1.E) (CC.1.4.1.K) (CC.1.4.1.Q) Varying types of sentences (simple, compound, interrogative, imperative, exclamatory) (CC.1.4.1.K) (CC.1.4.1.Q) Applying capitalization rules to capitalize dates and names (CC.1.4.1.L) (CC.1.4.1.R) Employing punctuation (end punctuation, comma with items in a series) (CC.1.4.1.L) Spell untaught words phonetically (CC.1.4.1.L) (CC.1.4.1.R)
Technology Literacy	<ul style="list-style-type: none"> Emphasizing digital tools for instructional and student productivity (CC.1.4.1.U)

* The purpose of this document is to provide a summary of similarities and differences between PA Academic Standards and PA Core Standards. This is not intended to be a curriculum guide – only to identify shifts in delivery of instruction

Sample Grade 12 ELA Unit



Baldwin-Whitehall School District UNIT OF INSTRUCTION OVERVIEW

General Course Information

Course Title:	12 CP English	Course Code:	
Pre-requisites:	English 11	Time Allocated Per Unit: <i>(Based on 185 days of instruction)</i>	18-25
Authors:	Brigetta Del Re, Daniel Harrold, Lisa Klein	Last Updated:	August 11, 2016
Reviewed by:	Andrea Huffman	Date Entered:	

Course Description

- *What information would accurately and articulately describe what students will know and be able to do as a result of this course?*
 - Is the description worded in such a way that it is engaging and interesting to both students and parents?
 - Does the description provide the essential skills and competencies that students will be able to demonstrate upon successful completion of the course?
 - Does the description mention the duration of the course?
 - Does the description use the title of the course within it?
 - Does the description specifically communicate expectations of students?

Students who plan to attend a four-year college or university should choose this course. Based on a survey of British literature, the course emphasizes reading, writing, speaking, and listening skills. A historical approach to the literature is taken ranging from the Anglo-Saxon period to contemporary times. Works are analyzed, criticized, and appreciated for real-life applications to the students' experiences. Integrated with this literary study are instruction, practice, application, and development of multi-paragraph essays. Students also study related vocabulary, prepare and present speeches, develop a research project, and respond orally and in writing to ideas presented, read, and discussed. In addition, due to required independent readings, students learn to apply time management skills.

Unit Title 1	Brave New World Beyond Baldwin	Instructional Days Needed	25
--------------	--------------------------------	---------------------------	----

Competencies/Academic Standards

- *What relevant goals (e.g., content standards, course or program objectives, learning outcomes) will this design address?*
 - Select specific standards or assessment anchors that address the core of instruction.
 - Use Common Core, PA Academic Standards, Keystone Assessment Anchors, etc., as appropriate.

Focus Standards:

1.3 Reading Literature

CC.1.3.11-12.A- Determine and analyze the relationship between two or more themes or central ideas of a text, including the development and interaction of the themes; provide an objective summary of the text.

CC.1.3.11-12.C- Analyze the impact of the author's choices regarding how to develop and relate elements of a story of drama

1.2 Reading Informational Text

CC.1.2.11-12.A- Determine and analyze the relationship between two or more themes or central ideas of a text, including the development and interaction of the themes; provide an objective summary of the text.

CC.1.2.11-12.C- Analyze the interaction and develop



2016-2017 ELA Curriculum Budget

The ELA curriculum budget has been submitted in four phases and is not to exceed \$200,000.00.

Phase	Cost
Phase 1: Submitted in June 2016	\$15,193.15
Phase 2: Submitted in August 2016	\$29,112.77
Phase 3: Submitted in September 2016	\$26,317.38
Phase 4: Remaining budget to be submitted throughout the 2016-2017 school year	\$129,376.70
	Grand Total
	\$200,000.00



2016-2017 Content Focus Areas

- Science Grades (6-12)
- World Languages Grades (7-12)
- Special Area/Encore/Elective Courses (K-12)
 - Family and Consumer Sciences
 - Fine and Practical Arts
 - Library
 - Music
 - Physical Education and Health
 - Technology



New Elementary Special Area Rotation Schedule

Sample Schedule of Rotations

Rotation #	Length of Rotation	Special Area Course
1	6 weeks	Physical Education/Health
2	6 weeks	Art
3	6 weeks	B.C.I.T.
4	6 weeks	Music
5	6 weeks	Physical Education and Health
6	6 weeks	Library



Building-Level Curriculum Nights

Transition Grades (Attending a New Building)

Date	Building	Grade Level
August 23, 2016	Harrison Middle School	6
August 24, 2016	McAnnulty Elementary School Paynter Elementary School	Kindergarten
August 25, 2016	Baldwin High School Whitehall Elementary School	9 2



Building-Level Curriculum Nights

All Other Grade Levels

Date	Building	Grade Level
September 13, 2016	McAnnulty Elementary School Paynter Elementary School	1 1-5
September 15, 2016	Whitehall Elementary School	3-5
September 20, 2016	Harrison Middle School	7-8
September 22, 2016	Baldwin High School	10-12



District Partnerships/Opportunities

- **Robomatters (Partnership with Carnegie Mellon University)**
 - Grades 2-12 Computer Science Courses (IDEAS – Iterate, Design, Engage, Apply, and Synthesize)
 - Elementary B.C.I.T. Teachers and Elementary Library Media Specialists
 - Intensive training on how to implement the courses (beginning at the elementary level)
 - No cost to the district

- **Art Institute of Pittsburgh**
 - Creative Project-Based Curriculum Workshop (Teachers will explore innovative trends in creative fields)
 - Secondary Art and Family & Consumer Sciences Teachers
 - No cost to the district



District Partnerships/Opportunities

➤ **ASSET**

- Hosting STEM Community Forum
- September 30, 2016 @ Baldwin High School (LGI 1) from 9:00 am – 12:00 pm

➤ **California University of Pennsylvania**

- Potential Center for Innovation space
- Professional Development for teachers and administrators
- Apply for future grants as co-authors

➤ **Carnegie Science Center**

- STEM Pathway Partner
- Year 2 of Partnership
- Received \$1,000 Mini Grant for “Science on the Road”
- Eligible for \$3,000 Grant during the 2016-2017 School Year



District Partnerships/Opportunities

➤ Flight 93 National Memorial

- Participation in Distance Learning Event
- Anniversary observance of September 11, 2001
- Rangers from the National Park Service will explain how the memorial honors the Flight 93 passengers and crew, share their story, and explore the symbolism that can be found throughout the site today
- Secondary Students (Grades 8 and 9)
- September 9, 2016 from 9:30 am – 10:30 am

