

AGENDA
Marion County Board of Education
Regular Session
Tuesday, April 3, 2018
Central Office
6:00 pm

Mr. Pellegrin gave the invocation and Mr. Reider led the Pledge of Allegiance.

The Marion County Board of Education met in regular session on Tuesday, April 3, 2018 at 6:00 pm.

Mr. Dragich called the meeting to order at 6:00 pm.

MEMBERS PRESENT: Mr. Dragich, Mr. Montgomery, Mr. Richard Pellegrin, Dr. Babbette Simms (by phone), and Ms. Mary Jo Thomas

41- 1000 INFORMATION – RECOGNITIONS – RECOMMENDATIONS – REPORTS

John Bradshaw – CMTA Energy Solutions Presentation

Jonathan Gasser, PE, CXA, CEM, LEED AP– CMTA Energy Solutions Presentation

Mr. Pellegrin made a motion, seconded by Mr. Montgomery to approve the following:

41-2000 MINUTES – AGREEMENTS – CONTRACTS

2274 MINUTES

The approval of the Official Proceedings for the Regular meeting on March 19, 2018.

2275 MINUTES

The approval of the Official Proceedings for the Special meeting scheduled for March 21, 2018.

2276 MINUTES

The approval of the Official Proceedings for the Calendar review meeting on March 26, 2018.

2277 PHIL CHALMERS- SPEAKER – PREVENTION WEEK

The approval of the Speaker Phil Chalmers to speak to students at North Marion High School, East Fairmont High School and Fairmont Senior High School during prevention week. Middle School students may be invited if space permits.

2278 CHAPERONE LIST-BASEBALL-FSHS

The approval of the chaperone list for the baseball team at Fairmont Senior High School for the 2017-18 SY.

2279 BOOSTERS-SOFTBALL-FSHS

The approval of the Booster program for the softball team at Fairmont Senior High School for the 2017-18 SY.

2280 CHAPERONE LIST-SOFTBALL - EFHS

The approval of the updated chaperone list for softball for East Fairmont High School for the 2017-18 SY.

2281 MOU-WV FAMILY NUTRITION PROGRAM

The approval of Memorandum of Understand for the West Virginia's Family Nutrition Program for the 2018-19 SY.

2282 LOWES-AIR CONDITIONERS- MANNINGTON MIDDLE

The approval to purchase 14 Air Conditioners from Lowes, in the amount of \$7,315.00. FUNDING: Mannington Middle \$7,657.50 County \$3,657.50.

YEAS: Dragich, Montgomery, Pellegrin, Simms & Thomas **NAYS: 0**

Ms. Thomas made a motion, seconded by Mr. Montgomery to approve the following:

41-3000 CONSENT**3031 OUT OF COUNTY TRANSFER REQUEST**

The approval of the requested student transfers deemed to be in the best interest of the child.

3032 OUT OF COUNTY TRANSFER REQUEST

The approval of the requested student transfers deemed to be in the best interest of the child.

3033 OUT OF COUNTY TRANSFER REQUEST

The approval of the requested student transfers deemed to be in the best interest of the child.

3034 OUT OF COUNTY TRANSFER REQUES

The approval of the requested student transfers deemed to be in the best interest of the child.

YEAS: Dragich, Montgomery, Pellegrin, Simms & Thomas **NAYS: 0**

Mr. Pellegrin made a motion, seconded by Ms. Thomas to go into executive session to discuss bills at 6:48.

YEAS: Dragich, Montgomery, Pellegrin, Simms & Thomas **NAYS: 0**

Ms. Thomas made a motion, seconded by Mr. Montgomery to return to regular session at 7:32. Dr. Simms was disconnected.

YEAS: Dragich, Montgomery, Pellegrin, & Thomas **NAYS: 0**

Mr. Montgomery made a motion, seconded by Mr. Pellegrin to approve the following:

41-4000 FINANCIAL

4033 Vender Report dated March 27, 2018.

4034 Transfers and Supplements dated March 27, 2018.

4035 Transfers and Supplements dated March 28, 2018.

4036 MEDICAID E-FILE LICENSE AGREEMENT 2018-19

The approval of the Medicaid E-File License Agreement that will service the 12 RESA counties for 2018-2019 SY, in the amount of \$7,517.40. FUNDING: County (*Billing other Counties*)

YEAS: Dragich, Montgomery, Pellegrin, & Thomas

NAYS: 0

Ms. Thomas made a motion, seconded by Mr. Pellegrin to approve the following except for items 5363 and 5364, which were voted on separately:

41-5000 PERSONNEL

5345 Field Trip – Marion County School Bus

The approval of the following:

Monongah Elementary, Grade 3, requests permission to travel to Avella, PA, by Marion County School Bus to experience 18th Century Settlers and Native American Life Styles at Meadow Croft Village.

Dates: June 5, 2018

Approximate number of students: 62

Chaperone(s): M. Boledovic, J. Lantz, A. Darrah and LPN Aide W. Tobery

Approximate Cost: \$175.00

Source of funds: General Fund

Number of school days lost: 1

5346 Field Trip – Marion County School Bus

The approval of the following:

Fairmont Senior High School, Girls Lacrosse, requests permission to travel by Marion County School Bus to Mercersburg, PA, to participate in JV Games.

Dates: May 5, 2018

Approximate number of students: 35

Chaperone(s): Jon Cain, Jerry Gardner, Gina Koski and Cathy Shaw

Approximate Cost: \$2,500.00

Source of funds: Boosters

Number of school days lost: 0

5347 Field Trip – Marion County School Bus

The approval of the following:

East Fairmont High School, STEM Club, requests permission to travel by Marion County School Bus to Hershey Park, PA, to participate in Math Day at Hershey Park.

Dates: April 27, 2018

Approximate number of students: 50

Chaperone(s): Miriam Straka, Katie Cross, Lucia Perrotti, Rebecca Merritt and Candy Marcum

Approximate Cost: \$400.00

Source of funds: STEM

Number of school days lost: 1

5348 Field Trip – Commercial Carrier

The approval of the following:

Fairmont Senior High School, Madrigals, requests permission to travel by Central Cab USA to Nashville, TN, to participate in National Choral Competition.

Dates: April 11 - 15, 2018

Approximate number of students: 53

Chaperones: Greg DeVito, Danielle DeVito, Lana Smith, Vivian Jenab, Lori Coleman, Mel Coleman, Tracy Runyan, Kim Martin, Erin Bashaw and LeeAnn Blake.

Approximate Cost: \$25,000

Source of funds: Boosters

Number of school days lost: 2

5349 Field Trip – Private Auto

The approval of the following:

Marion County Technical Center, DECA, requests permission to travel by bus (WVDE – DECA providing buses) to Atlanta, Georgia, to participate in the DECA International Career Development Conference.

Dates: April 20 - 25, 2018

Approximate number of students: 8

Chaperones: Kathy Lupo

Approximate Cost: \$12,000

Source of funds: DECA

Number of school days lost: 4

5350 Field Trip – Private Auto

The approval of the following:

Fairmont Senior High School, DECA, requests permission to travel by private auto to Hershey, PA., to visit QVC – Behind the scenes business activities.

Dates: May 3 - 5, 2018

Approximate number of students: 8

Chaperones: Deanna Kiser and Jim Green

Approximate Cost: \$1,900.00

Source of funds: DECA/FBLA

Number of school days lost: 2

5351 Employment – Paid Coach

The approval of the following paid coaching positions effective with the 2017-18 season pending sufficient participation for a team:

Barrackville

Michael VanGilder Head Softball SSAC

West Fairmont Middle

Lori Uram Asst. Girls Track Prof

5352 Resignation – Coach

The approval of the following:

East Fairmont High

Inez Hill Soccer Coach
Effective: March 13, 2018

Fairmont Senior High

Marisela Garcia Girls Volleyball Coach Prof
Effective: March 27, 2018

5353 Employment - Substitute Professional

The approval of the following pending WV certification and CIB verification:

Jacinda Hickman Speech Pathologist Assistant

Jess McIntire Sub Permit

Evonne Maddow Student Teacher Permit

Lori Miller Speech Pathologist

Mary Anne Mullenax Prof

Brenda Rowlands Speech Pathologist

Samara Saunders Sub Permit

5354 Employment - Professional

The approval of the following:

Crystal Bennington Occupational Therapist, Itinerant
220 Days
Effective: July 1, 2018

Cheryl Bifano Audiologist, Itinerant
200 Days
Effective: August 16, 2018

Diana Carter Occupational Therapist, Itinerant
200 Days
Effective: August 16, 2018

Sandy Furbee Special Olympics Coordinator, NMHS
Effective: April 5, 2018

Samantha Harkins Special Olympics Coordinator, EFHS
Effective: April 5, 2018

Audra Moore Physical Therapist, Itinerant
220 Days
Effective: July 1, 2018

Amelia Mullens 7th/8th Science – Barrackville
200 Days
Effective: August 16, 2018

Chelsey Stucin Special Olympics Coordinator, FSHS
Effective: April 5, 2018

5355 Leave of Absence – Professional

The approval of the following:

Tammy Tennant Phys Ed Fairview Middle
Requests an unpaid medical leave of absence from February 12 – March 27,
2018

Lois Thibodeau PK Watson
Requests an extension of her unpaid medical leave of absence from March 5,
2018 to April 30, 2018

5356 Reassignment – Professional

The following reassignment(s) are endorsed by the School Principal, and Faculty Senate Designee(s):

<u>Andrea Carpenter</u>	From Grade 5 Barrackville Elem/Mid 200 Days Effective: August 16, 2018	To Grade 1 Barrackville Elem/Mid 200 Days
-------------------------	--	--

<u>Jessie Long</u>	Library/Media East Fairmont Middle 200 Days Effective: August 16, 2018	7 th /8 th Language Arts Fairview Middle 200 Days
--------------------	---	---

5357 Employment – Substitute Service Personnel

The approval of the following:

Richard Gawthrop Substitute Custodian

Fred Holt Substitute Custodian

Douglas Wyatt Substitute Bus Operator

5358 Leave of Absence – Service

The approval of the following:

Cynthia Cole Cook East Park School
Requests an unpaid medical leave of absence from March 12, 13, 14, 15, and 16, 2018

Charlene O'Donnell ECCAT Jayenne
Requests an unpaid medical leave of absence from March 12, 13, 14, 15, 19, 20, and 21, 2018

Larry Stewart Mechanic Transportation
Request an unpaid medical leave of absence for January 16, 2018, January 25, 2018 and February 19 – March 19, 2018

Doug Tennant Truck Driver Maintenance
Requests an unpaid medical leave of absence from March 1 – April 23, 2018

Tonquilla Watson Sign Support Spec. Pleasant Valley
Requests an unpaid medical leave of absence from February 26, 2018 – April 2, 2018

5359 Resignation – Substitute Service Personnel

The approval of the following:

Michelle Pethtel Substitute Aide
Effective: April 12, 2018

Nathan Pethtel Substitute Custodian
Effective: March 16, 2018

5360 Reassignment – Service Personnel

The approval of the following:

	FROM	TO
<u>Brittany Shutler</u>	ECCAT Watson 200 Days	ECCAT Monongah Elementary 200 Days
	Effective: August 16, 2018	

<u>Rhonda Toothman</u>	Custodian I/II Fairmont Senior 210 Days	Custodian III Fairview Elem 210 Days
	Effective: First day of custodian calendar for 18-19 SY	

<u>Erika Wright</u>	ECCAT Jayenne 200 Days	Special Ed Aide-Itinerant Jayenne 200 Days
	Effective: August 16, 2018	

5361 Retirement – Service Personnel

The approval of the following:

<u>Judith McDowell</u>	Bus Aide 200 Days	Transportation
	Effective: June 30, 2018	

5362 CORRECTION -Reassignment – Service Personnel

The approval of the following correction from Item 5340 from the March 19, 2018 agenda:

WAS	FROM	TO
<u>Kevin Gump</u>	Bus 18 Transportation 200 Days	Bus 97 Transportation 200 Days
	Effective: March 21, 2018	

CORRECTION

Kevin Gump

FROM

Bus 18

Transportation

200 Days

Effective: August 16, 2018

TO

Bus 97

Transportation

200 Days

YEAS: Dragich, Montgomery, Pellegrin, & Thomas

NAYS: 0

Ms. Thomas made a motion, seconded by Mr. Pellegrin to approve the following:

5363 TERMINATION – Substitute Service

The that _____, _____, be terminated for failure to complete new hire procedures.

YEAS: Dragich, Montgomery, Pellegrin, & Thomas

NAYS: 0

Mr. Montgomery made a motion, seconded by Ms. Thomas to approve the following:

5364 Retirement – Professional

The approval of the following retirement:

Scott Vingle

West Fairmont Middle School

200 Days

Effective: April 9, 2018

YEAS: Dragich, Montgomery, Pellegrin, & Thomas

NAYS: 0

Mr. Montgomery made a motion, seconded by Ms. Thomas to approve the following except for item 6007:

Except for #6007(First review)

41-6000 DISCUSSION – NEW POLICIES AND REVISIONS-

REVIEWED 03-06-18, 03-19-18, 04-03-18

6006 REVISION – 3120.12 Substitutes in areas of critical needs and shortage

YEAS: Dragich, Montgomery, Pellegrin, & Thomas

NAYS: 0

REVIEWED 04-03-18

6007 REVISION – 8510 Wellness

41-7000 SUPERINTENDENT’S REPORT

New website

State Superintendent “Teacher of the Year”

SAT vs ACT

Ms. Deasy – “Hero” Resource Network

Review of update to school calendar

Mr. Pellegrin made a motion, seconded by Ms. Thomas to approve the following:

41- 8000 MATTERS FROM THE BOARD

8010 STUDENT EXPULSION

The approval of a student to be expelled for once calendar year for violation of the Safe Schools Act.

YEAS: Dragich, Montgomery, Pellegrin, & Thomas

NAYS: 0

Mr. Pellegrin made a motion, seconded by Ms. Thomas to approve the following:

8011 STUDENT EXPULSION

The approval of a student to be expelled for once calendar year for violation of the Safe Schools Act.

YEAS: Dragich, Montgomery, Pellegrin, & Thomas

NAYS: 0

41- 9000 FUTURE MEETINGS

DATE		PURPOSE	TIME	PLACE
Apr 3	Tue	Regular Session	6:00 pm	Central Office
Apr 16	Mon	Regular Session	6:00 pm	Central Office
Apr 17	Tue	Work Session – FSU	4:30 pm	Central Office
Apr 17	Tue	Budget Meeting Resumed	6:00 pm	Central Office

ADJOURNED

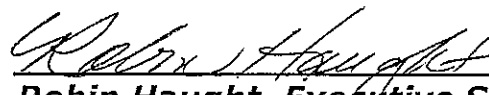
Mr. Pellegrin made a motion, seconded by Ms. Thomas to adjourn at 7:44 pm.

YEAS: Dragich, Montgomery, Pellegrin, & Thomas

NAYS: 0

Thomas Dragich, President

Gary L. Price, Superintendent/Secretary



Robin Haught, Executive Secretary

TO: Gary L. Price, Superintendent
Randall Farley, Administrative Assistant of C & I

FROM: Gina L. DeLorenzo, Coordinator of Curriculum & Instruction

RE: Elective Offerings Requiring Board of Education Approval

DATE: April 6, 2018

Per WV State Board Policy 2510, Assuring the Quality of Education: Regulations for Education Programs, "Elective offerings not based on West Virginia Board of Education content standards and objectives must have written content standards and objectives approved by the county board of education." The following elective high school course is being offered with the attached standards submitted for approval:

*Globaloria 3

In order for credit to be awarded for this elective, county board of education approval is required.

Title of Course:

Globaloria 3

Course Description:

Students continue to exercise the 21st Century Learning Skills to create an educational game using the HTML Webdesign and Javascript Language. Students will hone skills in collaboration, problem solving, and professional conduct within social networks, blogging, research, and presentations through video and teleconferencing, and computer coding. Students will interact with other Globaloria schools and staff and will present their games to Globaloria professionals (located in Brooklyn, NY) via computer conferencing.

Students design a web page of their game Concept and create their game in JavaScript.

Content Standards and Objectives:

ELA RI 4	<i>Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text</i>
ELA RI 7	<i>Integrate and evaluate multiple sources of information presented in different media or formats</i>
ELA WHST 1	<i>Write arguments focused on discipline-specific content</i>
ELA WHST 2	<i>Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes</i>
ELA WHST 4	<i>Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience</i>
ELA WHST 5	<i>Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience</i>
ELA WHST 6	<i>Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.</i>
ELA WHST 7	<i>Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</i>
ELA WHST 8	<i>Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.</i>
ELA WHST 9	<i>Draw evidence from informational texts to support analysis, reflection, and research.</i>
WHST.9-12.4	<i>Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</i>
WHST.9-12.6	<i>Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.</i>
WHST.9-12.10	<i>Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</i>
ELA SL 1	<i>Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade level topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.</i>

ELA SL 2	<i>Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.</i>
ELA SL 4	<i>Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.</i>
ELA SL 5	<i>Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.</i>
ELA SL 6	<i>Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.</i>
SL.9-10.2	<i>Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.</i>
SL.9-10.5	<i>Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.</i>
SL.11-12.2	<i>Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.</i>
SL.11-12.4	<i>Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.</i>
SL.11-12.5	<i>Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.</i>
ELA RH 2	<i>Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.</i>
ELA RH 7	<i>Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.</i>
ELA L 6	<i>Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</i>
L.9-12.1	<i>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</i>
L.9-12.2	<i>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</i>
L.9-12.6	<i>Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</i>
ELA RST 2	<i>Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</i>
ELA RST 7	<i>Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.</i>
ELA RST 9	<i>Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</i>

RST.9-10.3	<i>Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.</i>
RST.9-10.4	<i>Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.</i>
RST.9-10.10	<i>By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</i>
RST.11-12.3	<i>Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.</i>
RST.11-12.4	<i>Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.</i>
RST.11-12.7	<i>Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.</i>
RST.11-12.9	<i>Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</i>
RST.11-12.10	<i>By the end of grade 12, read and comprehend science/technical texts in the grades 11–CCR text complexity band independently and proficiently.</i>
ELA RH 8	<i>Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.</i>
ELA RH 9	<i>Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.</i>
MP 1	<i>Make sense of problems and persevere in solving them.</i>
MP 2	<i>Reason abstractly and quantitatively.</i>
MP 3	<i>Construct viable arguments and critique the reasoning of others.</i>
MP 4	<i>Model with mathematics.</i>
MP 5	<i>Use appropriate tools strategically.</i>
MP 6	<i>Attend to precision.</i>
MP 7	<i>Look for and make use of structure.</i>
MATH HSF-IF.B.4	<i>For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.</i>
MATH HSF-IF.B.6	<i>Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.</i>
NETS: CI	<i>Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.</i> <i>a. Apply existing knowledge to generate new ideas, products, or processes</i> <i>b. Create original works as a means of personal or group expression</i> <i>c. Use models and simulations to explore complex systems and issues</i> <i>d. Identify trends and forecast possibilities</i>
NETS: CC	<i>Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.</i>

	<p>a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media</p> <p>b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats</p> <p>c. Develop cultural understanding and global awareness by engaging with learners of other cultures</p> <p>d. Contribute to project teams to produce original works or solve problems</p>
NETS: R&IF	<p>Students apply digital tools to gather, evaluate, and use information.</p> <p>a. Plan strategies to guide inquiry</p> <p>b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media</p> <p>c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks</p> <p>d. Process data and report results</p>
NETS: CT/PS/DM	<p>Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</p> <p>a. Identify and define authentic problems and significant questions for investigation</p> <p>b. Plan and manage activities to develop a solution or complete a project</p> <p>c. Collect and analyze data to identify solutions and/or make informed decisions</p> <p>d. Use multiple processes and diverse perspectives to explore alternative solutions</p>
NETS: DC	<p>Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p> <p>a. Advocate and practice safe, legal, and responsible use of information and technology</p> <p>b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity</p> <p>c. Demonstrate personal responsibility for lifelong learning</p> <p>d. Exhibit leadership for digital citizenship</p>
NETS: TO&C	<p>Students demonstrate a sound understanding of technology concepts, systems, and operations.</p> <p>a. Understand and use technology systems</p> <p>b. Select and use applications effectively and productively</p> <p>c. Troubleshoot systems and applications</p> <p>d. Transfer current knowledge to learning of new technologies</p>
NGSS: SEP	
NGSS:SEP:AQ&DP	<p>A: Ask questions:</p> <ul style="list-style-type: none"> - A.1: that arise from careful observation of phenomena, or unexpected results, to clarify and/or seek additional information. - A.2: that arise from examining models or a theory, to clarify and/or seek additional information and relationships. - A.3: to determine relationships, including quantitative relationships, between independent and dependent

	<p>variables.</p> <p>- A.4: to clarify and refine a model, an explanation, or an engineering problem</p>
	<p>B: Evaluate a question to determine if it is testable and relevant.</p> <p>C: Ask questions that can be investigated within the scope of the school laboratory, research facilities, or field (e.g., outdoor environment) with available resources and, when appropriate, frame a hypothesis based on a model or theory.</p>
	<p>D: Ask and/or evaluate questions that challenge the premise(s) of an argument, the interpretation of a data set, or the suitability of a design</p>
	<p>E: Define a design problem that involves the development of a process or system with interacting components and criteria and constraints that may include social, technical and/or environmental considerations.</p>
NGSS:SEP:D&UM	<p>A: Evaluate merits and limitations of two different models of the same proposed tool, process, mechanism, or system in order to select or revise a model that best fits the evidence or design criteria.</p> <p>B: Design a test of a model to ascertain its reliability.</p>
	<p>C: Develop, revise, and/or use a model based on evidence to illustrate and/or predict the relationships between systems or between components of a system.</p> <p>D: Develop and/or use multiple types of models to provide mechanistic accounts and/or predict phenomena, and move flexibly between model types based on merits and limitations.</p>
	<p>E: Develop a complex model that allows for manipulation and testing of a proposed process or system.</p> <p>F: Develop and/or use a model (including mathematical and computational) to generate data to support explanations, predict phenomena, analyze systems, and/or solve problems.</p>
NGSS:SEP:P&COI	<p>A: Plan an investigation or test a design individually and collaboratively to produce data to serve as the basis for evidence as part of building and revising models, supporting explanations for phenomena, or testing solutions to problems. Consider possible confounding variables or effects and evaluate the investigation's design to ensure variables are controlled.</p> <p>B: Plan and conduct an investigation individually and collaboratively to produce data to serve as the basis for evidence, and in the design: decide on types, how much, and accuracy of data needed to produce reliable measurements and consider limitations on the precision of the data (e.g., number of trials, cost, risk, time), and refine the design accordingly.</p> <p>C: Plan and conduct an investigation or test a design solution in a safe and ethical manner including considerations of environmental, social, and personal impacts.</p>
	<p>D: Select appropriate tools to collect, record, analyze, and evaluate data.</p>
	<p>E: Make directional hypotheses that specify what happens to a dependent variable when an independent variable is manipulated.</p> <p>F: Manipulate variables and collect data about a complex model of a proposed process or system to identify failure points or improve performance relative to criteria for success or other variables.</p>
NGSS:SEP:A&ID	<p>A: Analyze data using tools, technologies, and/or models (e.g., computational, mathematical) in order to make valid and reliable scientific claims or determine an optimal design solution.</p>
	<p>B: Apply concepts of statistics and probability (including determining function fits to data, slope, intercept, and correlation coefficient for linear fits) to scientific and engineering questions and problems, using digital tools when feasible.</p>
	<p>C: Consider limitations of data analysis (e.g., measurement error, sample selection) when analyzing and interpreting data. D: Compare and contrast various types of data sets (e.g., self-generated, archival) to examine consistency of measurements and observations.</p>
	<p>E: Evaluate the impact of new data on a working explanation and/or model of a proposed process or system.</p> <p>F: Analyze data to identify design features or characteristics of the components of a proposed process or system to optimize it relative to criteria for success.</p>
NGSS:SEP:UM&CT	<p>A: Create and/or revise a computational model or simulation of a phenomenon, designed device, process, or system.</p>
	<p>B: Use mathematical, computational, and/or algorithmic representations of phenomena or design solutions to describe and/or support claims and/or explanations.</p>

	<p><i>C: Apply techniques of algebra and functions to represent and solve scientific and engineering problems.</i></p> <p><i>D: Use simple limit cases to test mathematical expressions, computer programs, algorithms, or simulations of a process or system to see if a model "makes sense" by comparing the outcomes with what is known about the real world. E: Apply ratios, rates, percentages, and unit conversions in the context of complicated measurement problems involving quantities with derived or compound units (such as mg/mL, kg/m³, acre-feet, etc.).</i></p>
NGSS:SEP:CE&DS	<p><i>A: Make a quantitative and/or qualitative claim regarding the relationship between dependent and independent variables.</i></p>
	<p><i>B: Construct and revise an explanation based on valid and reliable evidence obtained from a variety of sources (including students' own investigations, models, theories, simulations, peer review) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.</i></p> <p><i>C: Apply scientific ideas, principles, and/or evidence to provide an explanation of phenomena and solve design problems, taking into account possible unanticipated effects.</i></p>
	<p><i>D: Apply scientific reasoning, theory, and/or models to link evidence to the claims to assess the extent to which the reasoning and data support the explanation or conclusion.</i></p>
	<p><i>E: Design, evaluate, and/or refine a solution to a complex real-world problem, based on scientific knowledge, student-generated sources of evidence, prioritized criteria, and tradeoff considerations.</i></p>
NGSS:SEP:ARG	<p><i>A: Compare and evaluate competing arguments or design solutions in light of currently accepted explanations, new evidence, limitations (e.g., trade-offs), constraints, and ethical issues.</i></p> <p><i>B: Evaluate the claims, evidence, and/or reasoning behind currently accepted explanations or solutions to determine the merits of arguments</i></p>
	<p><i>C: Respectfully provide and/or receive critiques on scientific arguments by probing reasoning and evidence and challenging ideas and conclusions, responding thoughtfully to diverse perspectives, and determining what additional information is required to resolve contradictions.</i></p>
	<p><i>D: Construct, use, and/or present an oral and written argument or counter-arguments based on data and evidence. Make and defend a claim based on evidence about the natural world or the effectiveness of a design solution that reflects scientific knowledge, and student-generated evidence.</i></p> <p><i>E: Evaluate competing design solutions to a real-world problem based on scientific ideas and principles, empirical evidence, and/or logical arguments regarding relevant factors (e.g. economic, societal, environmental, ethical considerations)</i></p>
NGSS:SEP:INFO	<p><i>A: Critically read scientific literature adapted for classroom use to determine the central ideas or conclusions and/or to obtain scientific and/or technical information to summarize complex evidence, concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</i></p>
	<p><i>B: Compare, integrate and evaluate sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a scientific question or solve a problem.</i></p>
	<p><i>C: Gather, read, and evaluate scientific and/or technical information from multiple authoritative sources, assessing the evidence and usefulness of each source. D: Evaluate the validity and reliability of and/or synthesize multiple claims, methods, and/or designs that appear in scientific and technical texts or media reports, verifying the data when possible. E: Communicate scientific and/or technical information or ideas (e.g. about phenomena and/or the process of development and the design and performance of a proposed process or system) in multiple formats (including orally, graphically, textually, and mathematically).</i></p>
NGSS:CC	
NGSS:CC:C&E	<p><i>A: Empirical evidence is required to differentiate between cause and correlation and make claims about specific causes and effects.</i></p> <p><i>B: Cause and effect relationships can be suggested and predicted for complex natural and human designed systems by examining what is known about smaller scale mechanisms within the system.</i></p>

	<p><i>C: Systems can be designed to cause a desired effect.</i></p> <p><i>D: Changes in systems may have various causes that may not have equal effects.</i></p>
NGSS:CC:S&SM	<p><i>A: Systems can be designed to do specific tasks.</i></p> <p><i>B: When investigating or describing a system, the boundaries and initial conditions of the system need to be defined and their inputs and outputs analyzed and described using models.</i></p> <p><i>C: Models (e.g., physical, mathematical, computer models) can be used to simulate systems and interactions—including energy, matter, and information flows—within and between systems at different scales.</i></p> <p><i>D: Models can be used to predict the behavior of a system, but these predictions have limited precision and reliability due to the assumptions and approximations inherent in models.</i></p>
NGSS:CC:S&F	<p><i>A: Investigating or designing new systems or structures requires a detailed examination of the properties of different materials, the structures of different components, and connections of components to reveal its function and/or solve a problem.</i></p> <p><i>B: The functions and properties of natural and designed objects and systems can be inferred from their overall structure, the way their components are shaped and used, and the molecular substructures of its various materials</i></p>
NGSS:CC:S&C	<p><i>A: Much of science deals with constructing explanations of how things change and how they remain stable.</i></p> <p><i>B: Change and rates of change can be quantified and modeled over very short or very long periods of time. Some system changes are irreversible.</i></p> <p><i>C: Feedback (negative or positive) can stabilize or destabilize a system.</i></p> <p><i>D: Systems can be designed for greater or lesser stability.</i></p>
	<p>https://csta.acm.org/Curriculum/sub/CurrFiles/CSTA Standards Mapped to STEM CC P21 Landscape New.pdf</p>
CT.L2-01	Use the basic steps in algorithmic problem-solving to design solutions (e.g., problem statement and exploration, examination of sample instances, design, implementing a solution, testing, and evaluation).
CT.L2-06	Describe and analyze a sequence of instructions being followed (e.g., describe a character's behavior in a video game as driven by rules and algorithms).
CT.L2-07	Represent data in a variety of ways including text, sounds, pictures, and numbers.
CPP.L2-02	Use a variety of multimedia tools and peripherals to support personal productivity and learning throughout the curriculum.
CPP.L2-03	Design, develop, publish, and present products (e.g., webpages, mobile applications, animations) using technology resources that demonstrate and communicate curriculum concepts.
CPP.L2-05	Implement problem solutions using a programming language, including: looping behavior, conditional statements, logic, expressions, variables, and functions.
CPP.L2-08	Demonstrate dispositions amenable to open-ended problem solving and programming (e.g., comfort with complexity, persistence, brainstorming, adaptability, patience, propensity to tinker, creativity, accepting challenge).

TO: Gary L. Price, Superintendent
Randall Farley, Administrative Assistant of C & I

FROM: Gina L. DeLorenzo, Coordinator of Curriculum & Instruction

RE: Elective Offerings Requiring Board of Education Approval

DATE: April 6, 2018

Per WV State Board Policy 2510, Assuring the Quality of Education: Regulations for Education Programs, "Elective offerings not based on West Virginia Board of Education content standards and objectives must have written content standards and objectives approved by the county board of education." The following elective high school course is being offered with the attached standards submitted for approval:

*Globaloria 4

In order for credit to be awarded for this elective, county board of education approval is required.

Title of Course:

Globaloria 4

Course Description:

Students continue to exercise the 21st Century Learning Skills to create an educational 3D game using the Unity Platform. Students will hone skills in collaboration, problem solving, and professional conduct within social networks, blogging, research, and presentations through video and teleconferencing, and computer coding. Students will interact with other Globaloria schools and staff and will present their games to Globaloria professionals (located in Brooklyn, NY) via computer conferencing.

Students create a 3D game Using the Unity platform. Students may also create a game to be used in the high school curriculum for a teacher.

Content Standards and Objectives:

ELA RI 4	<i>Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text</i>
ELA RI 7	<i>Integrate and evaluate multiple sources of information presented in different media or formats</i>
ELA WHST 1	<i>Write arguments focused on discipline-specific content</i>
ELA WHST 2	<i>Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes</i>
ELA WHST 4	<i>Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience</i>
ELA WHST 5	<i>Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience</i>
ELA WHST 6	<i>Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.</i>
ELA WHST 7	<i>Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</i>
ELA WHST 8	<i>Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.</i>
ELA WHST 9	<i>Draw evidence from informational texts to support analysis, reflection, and research.</i>
WHST.9-12.4	<i>Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</i>
WHST.9-12.6	<i>Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.</i>
WHST.9-12.10	<i>Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</i>

ELA SL 1	<i>Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade level topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.</i>
ELA SL 2	<i>Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.</i>
ELA SL 4	<i>Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.</i>
ELA SL 5	<i>Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.</i>
ELA SL 6	<i>Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.</i>
SL.9-10.2	<i>Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.</i>
SL.9-10.5	<i>Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.</i>
SL.11-12.2	<i>Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.</i>
SL.11-12.4	<i>Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.</i>
SL.11-12.5	<i>Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.</i>
ELA RH 2	<i>Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.</i>
ELA RH 7	<i>Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.</i>
ELA L 6	<i>Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</i>
L.9-12.1	<i>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</i>
L.9-12.2	<i>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</i>
L.9-12.6	<i>Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</i>
ELA RST 2	<i>Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</i>
ELA RST 7	<i>Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.</i>

ELA RST 9	<i>Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</i>
RST.9-10.3	<i>Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.</i>
RST.9-10.4	<i>Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.</i>
RST.9-10.10	<i>By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</i>
RST.11-12.3	<i>Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.</i>
RST.11-12.4	<i>Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.</i>
RST.11-12.7	<i>Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.</i>
RST.11-12.9	<i>Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</i>
RST.11-12.10	<i>By the end of grade 12, read and comprehend science/technical texts in the grades 11–CCR text complexity band independently and proficiently.</i>
ELA RH 8	<i>Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.</i>
ELA RH 9	<i>Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.</i>
MP 1	<i>Make sense of problems and persevere in solving them.</i>
MP 2	<i>Reason abstractly and quantitatively.</i>
MP 3	<i>Construct viable arguments and critique the reasoning of others.</i>
MP 4	<i>Model with mathematics.</i>
MP 5	<i>Use appropriate tools strategically.</i>
MP 6	<i>Attend to precision.</i>
MP 7	<i>Look for and make use of structure.</i>
MATH HSF-IF.B.4	<i>For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.</i>
MATH HSF-IF.B.6	<i>Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.</i>
NETS: CI	<i>Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.</i> <i>a. Apply existing knowledge to generate new ideas, products, or processes</i> <i>b. Create original works as a means of personal or group expression</i> <i>c. Use models and simulations to explore complex systems and issues</i> <i>d. Identify trends and forecast possibilities</i>

NETS: CC	<p>Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.</p> <ol style="list-style-type: none"> Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media Communicate information and ideas effectively to multiple audiences using a variety of media and formats Develop cultural understanding and global awareness by engaging with learners of other cultures Contribute to project teams to produce original works or solve problems
NETS: R&IF	<p>Students apply digital tools to gather, evaluate, and use information.</p> <ol style="list-style-type: none"> Plan strategies to guide inquiry Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media Evaluate and select information sources and digital tools based on the appropriateness to specific tasks Process data and report results
NETS: CT/PS/DM	<p>Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</p> <ol style="list-style-type: none"> Identify and define authentic problems and significant questions for investigation Plan and manage activities to develop a solution or complete a project Collect and analyze data to identify solutions and/or make informed decisions Use multiple processes and diverse perspectives to explore alternative solutions
NETS: DC	<p>Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p> <ol style="list-style-type: none"> Advocate and practice safe, legal, and responsible use of information and technology Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity Demonstrate personal responsibility for lifelong learning Exhibit leadership for digital citizenship
NETS: TO&C	<p>Students demonstrate a sound understanding of technology concepts, systems, and operations.</p> <ol style="list-style-type: none"> Understand and use technology systems Select and use applications effectively and productively Troubleshoot systems and applications Transfer current knowledge to learning of new technologies
NGSS: SEP	
NGSS:SEP:AQ&DP	<p>A: Ask questions:</p> <ul style="list-style-type: none"> - A.1: that arise from careful observation of phenomena, or unexpected results, to clarify and/or seek additional information. - A.2: that arise from examining models or a theory, to clarify and/or seek additional

	<p>information and relationships.</p> <p>- A.3: to determine relationships, including quantitative relationships, between independent and dependent variables.</p> <p>- A.4: to clarify and refine a model, an explanation, or an engineering problem</p>
	<p>B: Evaluate a question to determine if it is testable and relevant.</p> <p>C: Ask questions that can be investigated within the scope of the school laboratory, research facilities, or field (e.g., outdoor environment) with available resources and, when appropriate, frame a hypothesis based on a model or theory.</p>
	<p>D: Ask and/or evaluate questions that challenge the premise(s) of an argument, the interpretation of a data set, or the suitability of a design</p>
	<p>E: Define a design problem that involves the development of a process or system with interacting components and criteria and constraints that may include social, technical and/or environmental considerations.</p>
NGSS:SEP:D&UM	<p>A: Evaluate merits and limitations of two different models of the same proposed tool, process, mechanism, or system in order to select or revise a model that best fits the evidence or design criteria.</p> <p>B: Design a test of a model to ascertain its reliability.</p>
	<p>C: Develop, revise, and/or use a model based on evidence to illustrate and/or predict the relationships between systems or between components of a system.</p> <p>D: Develop and/or use multiple types of models to provide mechanistic accounts and/or predict phenomena, and move flexibly between model types based on merits and limitations.</p>
	<p>E: Develop a complex model that allows for manipulation and testing of a proposed process or system.</p> <p>F: Develop and/or use a model (including mathematical and computational) to generate data to support explanations, predict phenomena, analyze systems, and/or solve problems.</p>
NGSS:SEP:P&COI	<p>A: Plan an investigation or test a design individually and collaboratively to produce data to serve as the basis for evidence as part of building and revising models, supporting explanations for phenomena, or testing solutions to problems. Consider possible confounding variables or effects and evaluate the investigation's design to ensure variables are controlled.</p> <p>B: Plan and conduct an investigation individually and collaboratively to produce data to serve as the basis for evidence, and in the design: decide on types, how much, and accuracy of data needed to produce reliable measurements and consider limitations on the precision of the data (e.g., number of trials, cost, risk, time), and refine the design accordingly.</p> <p>C: Plan and conduct an investigation or test a design solution in a safe and ethical manner including considerations of environmental, social, and personal impacts.</p>
	<p>D: Select appropriate tools to collect, record, analyze, and evaluate data.</p>
	<p>E: Make directional hypotheses that specify what happens to a dependent variable when an independent variable is manipulated.</p> <p>F: Manipulate variables and collect data about a complex model of a proposed process or system to identify failure points or improve performance relative to criteria for success or other variables.</p>
NGSS:SEP:A&ID	<p>A: Analyze data using tools, technologies, and/or models (e.g., computational, mathematical) in order to make valid and reliable scientific claims or determine an optimal design solution.</p>
	<p>B: Apply concepts of statistics and probability (including determining function fits to data, slope, intercept, and correlation coefficient for linear fits) to scientific and engineering questions and problems, using digital tools when feasible.</p>
	<p>C: Consider limitations of data analysis (e.g., measurement error, sample selection) when analyzing and interpreting data. D: Compare and contrast various types of data sets (e.g., self-generated, archival) to examine consistency of measurements and observations.</p>
	<p>E: Evaluate the impact of new data on a working explanation and/or model of a proposed process or system.</p> <p>F: Analyze data to identify design features or characteristics of the components of a proposed process or system to optimize it relative to criteria for success.</p>
NGSS:SEP:UM&CT	<p>A: Create and/or revise a computational model or simulation of a phenomenon, designed device, process, or system.</p>

	<i>B: Use mathematical, computational, and/or algorithmic representations of phenomena or design solutions to describe and/or support claims and/or explanations.</i>
	<i>C: Apply techniques of algebra and functions to represent and solve scientific and engineering problems. D: Use simple limit cases to test mathematical expressions, computer programs, algorithms, or simulations of a process or system to see if a model "makes sense" by comparing the outcomes with what is known about the real world. E: Apply ratios, rates, percentages, and unit conversions in the context of complicated measurement problems involving quantities with derived or compound units (such as mg/mL, kg/m³, acre-feet, etc.).</i>
NGSS:SEP:CE&DS	<i>A: Make a quantitative and/or qualitative claim regarding the relationship between dependent and independent variables.</i>
	<i>B: Construct and revise an explanation based on valid and reliable evidence obtained from a variety of sources (including students' own investigations, models, theories, simulations, peer review) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future. C: Apply scientific ideas, principles, and/or evidence to provide an explanation of phenomena and solve design problems, taking into account possible unanticipated effects.</i>
	<i>D: Apply scientific reasoning, theory, and/or models to link evidence to the claims to assess the extent to which the reasoning and data support the explanation or conclusion.</i>
	<i>E: Design, evaluate, and/or refine a solution to a complex real-world problem, based on scientific knowledge, student-generated sources of evidence, prioritized criteria, and tradeoff considerations.</i>
NGSS:SEP:ARG	<i>A: Compare and evaluate competing arguments or design solutions in light of currently accepted explanations, new evidence, limitations (e.g., trade-offs), constraints, and ethical issues. B: Evaluate the claims, evidence, and/or reasoning behind currently accepted explanations or solutions to determine the merits of arguments</i>
	<i>C: Respectfully provide and/or receive critiques on scientific arguments by probing reasoning and evidence and challenging ideas and conclusions, responding thoughtfully to diverse perspectives, and determining what additional information is required to resolve contradictions.</i>
	<i>D: Construct, use, and/or present an oral and written argument or counter-arguments based on data and evidence. Make and defend a claim based on evidence about the natural world or the effectiveness of a design solution that reflects scientific knowledge, and student-generated evidence. E: Evaluate competing design solutions to a real-world problem based on scientific ideas and principles, empirical evidence, and/or logical arguments regarding relevant factors (e.g. economic, societal, environmental, ethical considerations)</i>
NGSS:SEP:INFO	<i>A: Critically read scientific literature adapted for classroom use to determine the central ideas or conclusions and/or to obtain scientific and/or technical information to summarize complex evidence, concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</i>
	<i>B: Compare, integrate and evaluate sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a scientific question or solve a problem.</i>
	<i>C: Gather, read, and evaluate scientific and/or technical information from multiple authoritative sources, assessing the evidence and usefulness of each source. D: Evaluate the validity and reliability of and/or synthesize multiple claims, methods, and/or designs that appear in scientific and technical texts or media reports, verifying the data when possible. E: Communicate scientific and/or technical information or ideas (e.g. about phenomena and/or the process of development and the design and performance of a proposed process or system) in multiple formats (including orally, graphically, textually, and mathematically).</i>
NGSS:CC	
NGSS:CC:C&E	<i>A: Empirical evidence is required to differentiate between cause and correlation and make claims about specific causes and effects. B: Cause and effect relationships can be suggested and predicted for complex natural and</i>

	<p>human designed systems by examining what is known about smaller scale mechanisms within the system.</p> <p>C: Systems can be designed to cause a desired effect.</p> <p>D: Changes in systems may have various causes that may not have equal effects.</p>
NGSS:CC:S&SM	<p>A: Systems can be designed to do specific tasks.</p> <p>B: When investigating or describing a system, the boundaries and initial conditions of the system need to be defined and their inputs and outputs analyzed and described using models.</p> <p>C: Models (e.g., physical, mathematical, computer models) can be used to simulate systems and interactions—including energy, matter, and information flows—within and between systems at different scales.</p> <p>D: Models can be used to predict the behavior of a system, but these predictions have limited precision and reliability due to the assumptions and approximations inherent in models.</p>
NGSS:CC:S&F	<p>A: Investigating or designing new systems or structures requires a detailed examination of the properties of different materials, the structures of different components, and connections of components to reveal its function and/or solve a problem.</p> <p>B: The functions and properties of natural and designed objects and systems can be inferred from their overall structure, the way their components are shaped and used, and the molecular substructures of its various materials</p>
NGSS:CC:S&C	<p>A: Much of science deals with constructing explanations of how things change and how they remain stable.</p> <p>B: Change and rates of change can be quantified and modeled over very short or very long periods of time. Some system changes are irreversible.</p> <p>C: Feedback (negative or positive) can stabilize or destabilize a system.</p> <p>D: Systems can be designed for greater or lesser stability.</p>
	<p>https://csta.acm.org/Curriculum/sub/CurrFiles/CSTA_Standards_Mapped_to_STEM_CC_P21_Landscape_New.pdf</p>
CT.L2-01	Use the basic steps in algorithmic problem-solving to design solutions (e.g., problem statement and exploration, examination of sample instances, design, implementing a solution, testing, and evaluation).
CT.L2-06	Describe and analyze a sequence of instructions being followed (e.g., describe a character's behavior in a video game as driven by rules and algorithms).
CT.L2-07	Represent data in a variety of ways including text, sounds, pictures, and numbers.
CPP.L2-02	Use a variety of multimedia tools and peripherals to support personal productivity and learning throughout the curriculum.
CPP.L2-03	Design, develop, publish, and present products (e.g., webpages, mobile applications, animations) using technology resources that demonstrate and communicate curriculum concepts.
CPP.L2-05	Implement problem solutions using a programming language, including: looping behavior, conditional statements, logic, expressions, variables, and functions.
CPP.L2-08	Demonstrate dispositions amenable to open-ended problem solving and programming (e.g., comfort with complexity, persistence, brainstorming, adaptability, patience, propensity to tinker, creativity, accepting challenge).

42-2286

TO: Gary L. Price, Superintendent
Randall Farley, Administrative Assistant of C & I

FROM: Gina L. DeLorenzo, Coordinator of Curriculum & Instruction

RE: Elective Offerings Requiring Board of Education Approval

DATE: April 6, 2018

Per WV State Board Policy 2510, Assuring the Quality of Education: Regulations for Education Programs, "Elective offerings not based on West Virginia Board of Education content standards and objectives must have written content standards and objectives approved by the county board of education." The following elective high school course is being offered with the attached standards submitted for approval:

*AP Music Theory

In order for credit to be awarded for this Advanced Placement course, county board of education approval is required.

TO: Gary L. Price, Superintendent
Randall Farley, Administrative Assistant of C & I

FROM: Gina L. DeLorenzo, Coordinator of Curriculum & Instruction

RE: Elective Offerings Requiring Board of Education Approval

DATE: April 6, 2018

The following Advanced Placement course is being offered with the attached standards submitted for approval:

*AP Music Theory

In order for credit to be awarded for this Advanced Placement course, county board of education approval is required.

AP Music Theory

Marion County Board of Education

West Virginia College and Career Readiness Standards for Music Theory- Grades 11 and 12

Course Description:

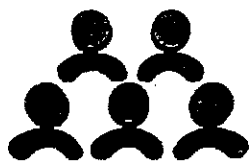
Music Theory students in grades 11 and 12 will become adept at reading music in all common clefs, creating chord progressions, interpreting and dictating given melodies and rhythms, identifying cadences, and utilizing all these skills to create their own written music. They will be focused on adhering to rules and guidelines established for traditional musical forms, as well as contemporary forms. Students will focus on analyzing and creating music of different genres and forms.

Content Standards and Objectives:

AP MT. S. 1	Students will identify notes and rhythms on common clefs used in music, create short melodic passages on these clefs, and write out melodic lines dictated to them.
AP MT. S. 1.1	Students will identify differences between tradition G and F Clef and the 3 "movable" clefs: Alto, Tenor, Soprano
AP MT. S. 1.2	Students will properly identify and write rhythms in all clefs
AP MT. S. 1.3	Students will create cadences and chord progressions in all clefs
AP MT. S. 1.4	Students will formulate multiple approaches to achieving proper voice part leading and movement within a melodic line and harmony while adhering to rules prescribed by Baroque and Classical form guidelines.

AP MT. S. 2	Students will sight read melodic passages in major and minor keys
AP MT. S. 2.1	Students will be able to label and identify all pitches in a given key using solfeggio
AP MT. S. 2.2	Students will perform 4 measure major key melodic sight singing passages
AP MT. S. 2.3	Students will perform 4 measure minor key melodic sight singing passages containing accidentals raising the 6 th and 7 th tones in the key, and will use proper solfeggio names for these altered tones

AP MT. S. 3.	Students will be able to edit and arrange music of different instrumentation on different clefs.
AP MT. S. 3. 1	Students will be able to identify and transpose instruments that use alternative key orientation. IE: Piano, Clarinet, Trumpet, Trombone, F Horn, Saxophone, etc.
AP MT. S. 3. 2	Students will transpose instruments from one key to another
AP MT. S. 3. 3	Students will take a given score and then transcribe and arrange the score to be performed by different voices and/or instruments
AP MT. S. 3. 4	Students will utilize personal instrument training to perform their arrangements as well as arrangements made by peers.



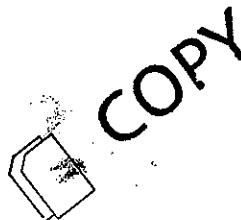
West Virginia School Board Association

WVSBA

PO Box 1008 • Charleston, West Virginia 25324 • (304) 346-0571 • WV 1-800-642-9233

April 1, 2018

Tom Dragich
President
Marion County Board of Education
303 East Park Avenue
Fairmont, WV 26554



Dear Mr. Dragich:

Enclosed is your county board's FY19 West Virginia School Board Association (WVSBA) Membership Subscription Fees (MSFs) statement.

As you will note, FY19 MSFs are "frozen" at the FY18 level. (In fact, MSFs have not increased for the past eight Fiscal Years.)

The West Virginia School Board Association represents the interests of county boards at various levels, including the governor's office, legislature, state Board of Education as well as through interaction with various public education, business and child advocacy organizations.

For the past several years, our state has dealt with considerable change, including changes in our state and local economies, declines in student enrollments, increasing policy complexity emanating from the federal and state governments as well as the state's Opioid Crisis and other related issues.

If considered in a monolithic sense, these issues seem impossible to fully comprehend or address. The association, however, is using member-inspired advocacy to provide appropriate input and to promote strategies which will enrich approaches to managing these issues in a way that WVSBA's core mission and goals are preserved and in a manner that involves partnering with various other organizations having similar goals and interests.

Indeed, the association strives to meet members' needs through effective legislative and advocacy efforts; through an effective communications effort, including a reconstructed association website which will include a significant emphasis regarding online training for county board members - training that meets state requirements. And, largely at county board and county superintendent request, county board member training is going to more avidly focus on individual board or regional needs.

Additionally, the association staff, through well-placed and well-considered outsourcing, operates efficiently, working to procure needed services without duplication or overhead.

Finally, WVSBA is working to implement various aspects of the strategic planning recommendations approved by the WVSBA membership. Thus, members can expect a broadened array of services, including programs relating to superintendent searches, consultations, policy development, workshops

42-2287

and seminars. Again, these services are designed to assist you and your board in best serving your true constituents, the students of the Mountain State.

You will easily note these efforts allow the association to continue to equip county boards with the skills to enhance leadership efficacy in terms of the governance and the visibility that should be afforded county boards as locally-elected representatives of the people – local educational leaders who are committed to providing the community voice in public education – an organizational endeavor since 1952.

We wish to thank our membership for this commitment to advancing public education in West Virginia.

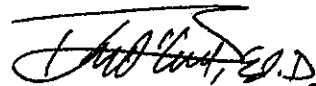
Plainly stated, for the last 65 years WVSBA's focus has been to promote effective county board service – integral to the advancement of public education in the Mountain State. Our mission can only be continued through your commitment to excellence in boardmanship through sustained association membership.

In short, the W. Va. School Board Association covets the Marion County Board of Education's support, dedication and leadership, as your board renews FY2019 Association membership.

Sincerely,



Barbara L. Parsons, Ed.D. (Monongalia),
WVSBA President



Howard M. O'Cull, Ed.D.,
WVSBA Executive Director

/smd

Enclosure: WVSBA Membership Subscription Fee Invoice

Cc: Marion County Board of Education Superintendent

42-2287
Invoice

West Virginia School Boards Association
 P.O. Box 1008

Date	Invoice #
4/1/2018	7800

Bill To
Marion County Board of Education Mr. Gary L. Price, Superintendent 1516 Mary Lou Retton Drive Fairmont, WV 26554

PAID
4/4/18

P.O. No.	Terms	Project

Quantity	Description	Rate	Amount
	WVSBA FY19 Membership Subscription Fees (Payment due by July 31, 2018)	6,241.00	6,241.00
Make checks payable to: WVSBA Mail checks to: WVSBA, PO Box 1008, Charleston, WV 25324		Total	\$6,241.00

42-2288

DATE: April 3, 2018
TO: Superintendent Gary Price
FROM: Chad Norman
SUBJECT: Marion County Technical Center Truck

I am requesting that this item be placed on the agenda for Board approval. The Marion County Transportation department recommends the purchase of a 2018 Ford F550 Truck for the Marion County Technical Center from Corwin Ford, in the amount of \$41,289.00. FUNDING: State Reimbursement \$29,728.08, County \$11,560.92

Other Bids:	Wilson Ford	\$44,373.00
	Urse	\$55,099.60

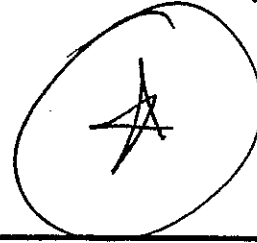
Marion County Technical Center

Truck Bids

April 3, 2018

Corwin Ford

42-2288



February 16, 2018

\$41,289.00

192 inch wheel base
Super Cab
10 ft bed

Ray, John 2018 F550 Supercab Bid

Corwin Ford is bidding the ordering of a 2018 F550 Super Cab. The order matches the bid specification with the exception of electronic shift on the fly and Dual Extra HD Alternator; neither is available with the specifications presented. No upfits are included with this bid (dump bed, winch, etc.).

The bid price is \$41,289 plus any applicable taxes or fees present at the time of delivery.

Please direct any questions to Jack Corwin at 304-986-1111 or jack.corwin@corwinford.com

Thank you,

Jack Corwin

- 192 inch wheel base
- smaller cab / back seat



P.O. Box 427 • Route 250 South
Mannington, West Virginia 26582
(304) 986-1111
www.corwinford.com

MEMORANDUM

TO: Mr. Gary Price, Superintendent
FROM: Diane Furman
DATE: April 11, 2018

The Marion County Mathematics Instructional Materials Committees respectfully request the Board approval of the following programs for the 2018 – 2024 school years:

K-5: McGraw-Hill MY MATH

6-8: McGraw-Hill MY MATH

9: McGraw-Hill Algebra I

10: McGraw-Hill Geometry

11: McGraw-Hill Algebra II

12: McGraw-Hill Trigonometry and Precalculus

Thirty-four (34) teachers served on the K-5 committee; twenty-three (23) teachers served on the 6-8 committee and fourteen (14) teachers served on the high school committee. All schools were represented on the committees.

The process for reviewing the proposed mathematics materials included independent reviews utilizing a rubric for evaluation; presentations by the top two programs; and grade level team evaluations.

If you have any questions about the K-5, 6-8 or high school committees' organization, work or decisions, please call at your convenience.

Thank you.