A TRADITION OF EXCELLENCE FOR ALL

LCS
LYNCHBURG CITY SCHOOLS

Lynchburg City Schools ● 915 Court Street ● Lynchburg, Virginia 24504

Lynchburg City School Board

Sharon Y. Carter
School Board District 2

James E. Coleman
School Board District 3

Regina T. Dolan-Sewell
School Board District 1

Mary Ann Hoss
School Board District 1

Michael J. Nilles
School Board District 3

Derek L. Polley
School Board District 1

Jennifer R. Poore
School Board District 2

Katie Snyder
School Board District 3

J. Marie Waller
School Board District 2

School Administration

Scott S. Brabrand
Superintendent

John C. McClain
Assistant Superintendent of
Student Learning and Success

Ben W. Copeland
Assistant Superintendent of
Operations and Administration

Anthony E. Beckles, Sr.
Chief Financial Officer

Wendie L. Sullivan
Clerk

SCHOOL BOARD MEETING
January 19, 2016 4:30 p.m.
School Administration Building
Board Room

A. CLOSED MEETING

B. PUBLIC COMMENTS

C. FINANCE REPORT

D. CONSENT AGENDA

E. STUDENT REPRESENTATIVE COMMENTS

F. UNFINISHED BUSINESS

G. NEW BUSINESS

H. SUPERINTENDENT'S COMMENTS

I. BOARD COMMENTS

J. CLOSED MEETING

K. INFORMATIONAL ITEMS

Next School Board Meeting: Tuesday, February 2, 2016, 5:30 p.m., Board Room, School Administration Building

L. ADJOURNMENT

Agenda Report

From: Scott S. Brabrand, Superintendent

Subject: Notice of Closed Meeting

Summary/Description:

Pursuant to the Code of Virginia §2.2-3711 (A) (7), the school board needs to convene a closed meeting for the purpose of discussing the following specific matters:

Legal Counsel

Disposition: ☒ **Action**
                       ☐ **Information**
                       ☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board approve a motion to enter into Closed Meeting in accordance with the Code of Virginia §2.2-3711 (A) (7) to receive consultation or legal briefing regarding specific legal matters requiring the provision of legal advice by such counsel.

Agenda Report

From: Scott S. Brabrand, Superintendent

Subject: Certification of Closed Meeting

Summary/Description:

The Lynchburg City School Board certifies that, in the closed meeting just concluded, nothing was discussed except the matters specifically identified in the motion to convene in a closed meeting and lawfully permitted to be so discussed under the provisions of the Virginia Freedom of Information Act cited in that motion.

Disposition: ☒ **Action**
                   ☐ **Information**
                   ☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board approve the Certification of Closed Meeting in accordance with the Code of Virginia §2.2-3712(D).

Agenda Report

From: Scott S. Brabrand, Superintendent

Subject: Public Comments

Summary/Description:

In accordance with School Board Policy 1-41: Public Participation, the school board welcomes requests and comments as established in the guidelines within that policy. Individuals who wish to speak before the school board shall have an opportunity to do so at this time.

Disposition: ☐ **Action**
☒ **Information**
☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board receive this agenda report as an informational item.

Agenda Report

From: Scott S. Brabrand, Superintendent
             Anthony E. Beckles, Sr., Chief Financial Officer

Subject: Finance Report

Summary/Description:
The school administration, in accordance with the FY2015-16 school operating budget, authorized, approved, and processed the necessary payments through December 31, 2015. The school administration certifies that the amounts approved are within budgetary limits and revenue.

The operating fund expenditure report summarizes the payments made through December 31, 2015, for the operating fund**.**

Total Operating Fund Budget	$ 90,820,024.00
Prior Year End Encumbrances	$ 90,304.40
Insurance Proceeds	$ 54,180.84
School Bus Funding	$ 977,000.00
Fund Balance Return	$ 2,316,449.00
Restricted Donations	$ 1,105.00
Adjusted Budget	$ 94,259,063.24

Through December 31, 2015

Actual Revenue Received	$ 32,915,577.87
Actual Expenditures	$ 40,429.345.78
Actual Encumbered	$ 44,353,746.33

Percent of Budget Received	34.92%
Percent of Budget Used, excluding encumbrances	42.89%
As of 12/31/15 – 6 months	50.00%

The revenue and expenditure reports detail the transactions recorded through December 31, 2015. All reports appear as attachments to the agenda report.

Disposition: ☐ **Action**
             ☒ **Information**
             ☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board receive the agenda report as an informational item.

Lynchburg City Schools
Operating Fund - Statement of Expenditures
For the Month Ending
December 31, 2015

			Fiscal Year 2015-16			
	BUDGET	TRANSACTIONS	BUDGET % USED	ENCUMBRANCES	BUDGET AVAILABLE	BUDGET % USED
INSTRUCTION						
FUNCTION 1100 CLASSROOM INSTRUCTION						
Personnel	49,143,329.00	20,465,372.85	41.64%	27,555,240.47	1,122,715.68	
Other	4,224,146.38	1,442,077.68	34.14%	140,268.98	2,641,799.72	
FUNCTION 1200 INST SUPPORT-STUDENT						
Personnel	3,449,198.59	1,395,952.85	40.47%	1,666,120.88	387,124.86	
Other	167,094.00	30,190.69	18.07%	45,598.45	91,304.86	
FUNCTION 1300 INST SUPPORT-STAFF						
Personnel	3,700,427.10	1,857,481.99	50.20%	1,946,932.04	(103,986.93)	
Other	1,569,040.34	436,216.82	27.80%	262,433.75	870,389.77	
FUNCTION 1400 INST SUPPORT-SCHOOL ADMN						
Personnel	5,252,359.04	2,504,123.49	47.68%	2,710,965.44	37,270.11	
Other	137,735.00	55,798.52	40.51%	18,727.68	63,208.80	
TOTAL INSTRUCTION	**67,643,329.45**	**28,187,214.89**	**41.67%**	**34,346,287.69**	**5,109,826.87**	**92.45%**
ADMINISTRATION						
FUNCTION 2100 ADMINISTRATION						
Personnel	2,416,531.68	1,217,490.68	50.38%	1,013,369.50	185,671.50	
Other	1,755,060.97	614,935.73	35.04%	361,339.48	778,785.76	
FUNCTION 2200 ATTENDANCE & HEALTH SERV						
Personnel	1,380,954.49	570,061.73	41.28%	756,166.20	54,726.56	
Other	112,225.00	49,420.60	44.04%	23,642.62	39,161.78	
TOTAL ADMINISTRATION	**5,664,772.14**	**2,451,908.74**	**43.28%**	**2,154,517.80**	**1,058,345.60**	**81.32%**
PUPIL TRANSPORTATION						
FUNCTION 3100 MANAGEMENT & DIRECTION						
Personnel	339,286.50	163,091.65	48.07%	159,603.48	16,591.37	
Other	23,276.00	13,892.24	59.68%	1,891.55	7,492.21	
FUNCTION 3200 VEHICLE OPERATION SERVICE						
Personnel	2,479,454.66	1,128,944.46	45.53%	1,194,501.87	156,008.33	
Other	965,210.00	386,115.90	40.00%	426,015.60	153,078.50	
FUNCTION 3300 MONITORING SERVICE						
Personnel	420,630.43	176,271.89	41.91%	220,881.22	23,477.32	
Other	0.00	0.00	0.00%	0.00	0.00	
FUNCTION 3400 VEHICLE MAINT SERVICE						
Personnel	351,419.67	181,105.38	51.54%	171,182.16	(867.87)	
Other	388,313.62	237,962.81	61.28%	93,915.80	56,435.01	
FUNCTION 3500 BUS PURCHASE - REGULAR						
Other	1,077,000.00	841,910.00	0.00%	97,819.00	137,271.00	
TOTAL PUPIL TRANSPORTATION	**6,044,590.88**	**3,129,294.33**	**51.77%**	**2,365,810.68**	**549,485.87**	**90.91%**
OPERATIONS & MAINTENANCE						
FUNCTION 4100 MANAGEMENT & DIRECTION						
Personnel	274,470.20	140,957.36	51.36%	140,936.52	(7,423.68)	
Other	84,000.00	46,636.94	55.52%	12,025.72	25,337.34	

FUNCTION 4200 BUILDING SERVICES						
Personnel	4,326,902.39	2,196,987.40	50.78%	1,968,155.67	161,759.32	
Other	5,876,243.54	2,387,907.31	40.64%	1,983,373.04	1,504,963.19	
FUNCTION 4300 GROUNDS SERVICES						
Personnel	242,869.76	119,217.03	49.09%	122,778.00	874.73	
Other	35,000.00	8,379.77	23.94%	800.00	25,820.23	
FUNCTION 4400 EQUIPMENT SERVICES						
Personnel	0.00	0.00	0.00%	0.00	0.00	
Other	105,859.00	70,841.82	66.92%	7,415.81	27,601.37	
FUNCTION 4500 VEHICLE SERVICES						
Personnel	0.00	0.00	0.00%	0.00	0.00	
Other	107,500.00	21,463.85	19.97%	15,956.42	70,079.73	
FUNCTION 4600 SECURITY SERVICES						
Personnel	30,257.65	7,927.28	26.20%	13,408.78	8,921.59	
Other	334,002.00	49,743.40	14.89%	115,199.10	169,059.50	
FUNCTION 4700 WAREHOUSING SERVICES						
Personnel	8,651.93	7,559.15	87.37%	0.00	1,092.78	
TOTAL OPERATIONS & MAINTENANCE	**11,425,756.47**	**5,057,621.31**	**44.27%**	**4,380,049.06**	**1,988,086.10**	**82.60%**
Other Non-Instructional Operations						
FUNCTION 5000 Non-Instructional Operations - Other	28,614.73	3,170.91	11.08%	0.00	25,443.82	
TOTAL Non-Instructional Operations	**28,614.73**	**3,170.91**	**11.08%**	**0.00**	**25,443.82**	**11.08%**
FACILITIES						
FUNCTION 6200 SITE IMPROVEMENTS	0.00	0.00	0.00%	0.00	0.00	
FUNCTION 6600 BLDG ADD & IMP SERVICES						
Personnel	22,178.34	8,799.64	39.68%	0.00	13,378.70	
Other	20,000.00	0.00	0.00%	0.00	20,000.00	
TOTAL FACILITIES	**42,178.34**	**8,799.64**	**20.86%**	**0.00**	**33,378.70**	**20.86%**
DEBT SERVICE						
FUNCTION 7100 DEBT SERVICE - Other	0.00	0.00	0.00%	0.00	0.00	
TOTAL DEBT SERVICE	**0.00**	**0.00**	**0.00%**	**0.00**	**0.00**	**0.00%**
TECHNOLOGY						
FUNCTION 8100 CLASSROOM INSTRUCTION						
Personnel	1,575,533.85	814,953.25	51.73%	869,373.86	(108,793.26)	
Other	762,505.49	118,911.84	15.59%	4,697.64	638,896.01	
FUNCTION 8200 INTRUCTIONAL SUPPORT						
Personnel	406,208.63	210,959.71	51.93%	212,427.36	(17,178.44)	
Other	665,573.26	446,511.16	67.09%	20,582.24	198,479.86	
TOTAL TECHNOLOGY	**3,409,821.23**	**1,591,335.96**	**46.67%**	**1,107,081.10**	**711,404.17**	**79.14%**
CONTINGENCY RESERVES						
FUNCTION 9100 CLASSROOM INSTRUCTION	0.00	0.00	0.00%	0.00	0.00	
FUNCTION 9300 ADMINISTRATION	0.00	0.00	0.00%	0.00	0.00	
FUNCTION 9500 PUPIL TRANSPORTATION	0.00	0.00	0.00%	0.00	0.00	
FUNCTION 9600 OPERATIONS & MAINTENANCE	0.00	0.00	0.00%	0.00	0.00	
TOTAL CONTINGENCY RESERVES	**0.00**	**0.00**	**0.00%**	**0.00**	**0.00**	**0.00%**
TOTAL OPERATING BUDGET	**94,259,063.24**	**40,429,345.78**	**42.89%**	**44,353,746.33**	**9,475,971.13**	**89.95%**

ACCOUNT TITLE	FY 2014-15				FY 2015-16			
	REVENUE BUDGET	YTD TRANSACTIONS	BUDGET BALANCE	% RECEIVED	REVENUE BUDGET	YTD TRANSACTIONS	BUDGET BALANCE	% RECEIVED
240308 SALES TAX RECEIPTS	(9,950,157.00)	(9,126,637.48)	(823,519.52)	91.72%	(10,248,262.00)	(4,378,458.66)	(5,869,803.34)	42.72%
240202 BASIC SCHOOL AID	(21,651,824.00)	(22,176,759.37)	524,935.37	102.42%	(22,130,823.00)	(11,065,411.50)	(11,065,411.50)	50.00%
240207 GIFTED & TALENTED	(240,997.00)	(245,765.00)	4,768.00	101.98%	(246,845.00)	(123,422.52)	(123,422.48)	50.00%
240208 REMEDIAL EDUCATION	(1,292,157.00)	(1,317,718.00)	25,561.00	101.98%	(1,323,508.00)	(661,754.02)	(661,753.98)	50.00%
240208 REMEDIAL EDUCATION	(123,629.00)	(107,296.63)	(16,332.37)	86.79%	(105,619.00)	(26,130.00)	(79,489.00)	24.74%
COMPENSATION SUPPLEMENT	0.00	0.00	0.00	0.00%	(399,315.00)	(159,726.00)	(239,589.00)	40.00%
240212 SPECIAL ED SOQ	(2,794,545.00)	(2,880,857.56)	86,312.56	103.09%	(2,862,348.00)	(1,431,174.00)	(1,431,174.00)	50.00%
240217 VOCATIONAL ED SOQ	(225,615.00)	(230,078.00)	4,463.00	101.98%	(231,089.00)	(115,544.52)	(115,544.48)	50.00%
240221 SOC SEC-INSTR	(1,404,964.00)	(1,432,757.00)	27,793.00	101.98%	(1,439,052.00)	(719,526.00)	(719,526.00)	50.00%
240223 VRS INSTRUCTIONAL	(2,861,204.00)	(2,917,805.00)	56,601.00	101.98%	(2,846,592.00)	(1,423,296.00)	(1,423,296.00)	50.00%
240241 GROUP LIFE INST	(87,169.00)	(88,894.00)	1,725.00	101.98%	(89,284.00)	(44,642.02)	(44,641.98)	50.00%
240228 READING INTERVENTN	(168,326.00)	(170,830.92)	2,504.92	101.49%	(188,365.00)	0.00	(188,365.00)	0.00%
240205 CAT-REG FOSTER	(71,041.00)	(134,715.00)	63,674.00	189.63%	(132,031.00)	0.00	(132,031.00)	0.00%
240246 CAT-HOMEBOUND	(208,242.00)	(100,051.45)	(108,190.55)	48.05%	(102,053.00)	(30,831.80)	(71,221.20)	30.21%
240248 REGIONAL TUITION	(766,658.00)	(716,395.02)	(50,262.98)	93.44%	(739,236.00)	0.00	(739,236.00)	0.00%
240265 AT RISK SOQ	(1,439,822.00)	(1,468,098.00)	28,276.00	101.96%	(1,474,228.00)	0.00	(1,474,228.00)	0.00%
240309 ESL	(117,708.00)	(129,125.00)	11,417.00	109.70%	(148,706.00)	0.00	(148,706.00)	0.00%
240281 AT RISK 4 YR OLDS	(1,059,219.00)	(1,057,968.00)	(1,251.00)	99.88%	(1,221,024.00)	0.00	(1,221,024.00)	0.00%
240218 CTE - ADULT ED	(19,175.00)	0.00	(19,175.00)	0.00%	0.00	0.00	0.00	0.00%
240252 CTE EQUIPMENT	0.00	(13,266.87)	13,266.87	100.00%	0.00	0.00	0.00	0.00%
240253 CTE OCC PREP	(42,990.00)	(39,387.00)	(3,603.00)	91.62%	(48,230.00)	0.00	(48,230.00)	0.00%
MATH/READING INSTR SPECIALISTS	(40,267.00)	(40,267.00)	0.00	100.00%	(40,624.00)	0.00	(40,624.00)	0.00%
EARLY READING SPECIALISTS INIT	0.00	0.00	0.00	0.00%	(38,807.00)	0.00	(38,807.00)	0.00%
240275 PRIMARY CLASS SIZE	(1,707,979.00)	(1,693,633.00)	(14,346.00)	99.16%	(1,705,555.00)	0.00	(1,705,555.00)	0.00%
240214 TEXTBOOKS	(493,378.00)	(518,668.08)	25,290.08	105.13%	(505,349.00)	(252,674.52)	(252,674.48)	50.00%
240405 ALGEBRA READINESS	(139,687.00)	(137,583.00)	(2,104.00)	98.49%	(137,583.00)	0.00	(137,583.00)	0.00%
COMMONWEALTH OF VA	**(46,906,753.00)**	**(46,744,556.38)**	**(162,196.62)**	**99.65%**	**(48,404,528.00)**	**(20,432,591.56)**	**(27,971,936.44)**	**42.21%**
330212 IMPACT AIDPL81-874	(6,000.00)	(9,173.69)	3,173.69	152.89%	(6,000.00)	(435.81)	(5,564.19)	7.26%
180303 MEDICAID REIMBURSE	(300,000.00)	(397,969.97)	97,969.97	132.66%	(300,000.00)	(49,283.02)	(250,716.98)	16.43%
JR ROTC	(120,000.00)	(100,170.96)	(19,829.04)	83.48%	(120,000.00)	(31,653.08)	(88,346.92)	26.38%
FEDERAL	**(426,000.00)**	**(507,314.62)**	**81,314.62**	**119.09%**	**(426,000.00)**	**(81,371.91)**	**(344,628.09)**	**19.10%**

Lynchburg City Schools
Operating Fund - Statement of Revenue
For the Month Ending
December 31, 2015

	FY 2014-2015				FY 2015-16			
	REVENUE BUDGET	YTD TRANSACTIONS	BUDGET BALANCE	% RECEIVED	REVENUE BUDGET	YTD TRANSACTIONS	BUDGET BALANCE	% RECEIVED
510500 CITY OPER APPR	(38,924,147.00)	(38,924,147.00)	0.00	100.00%	(40,114,276.00)	(8,450,000.00)	(31,664,276.00)	21.06%
510500 FUND BALANCE RETURN	(907,000.00)	(907,000.00)	0.00	100.00%	(2,316,449.00)	(2,316,449.00)	0.00	100.00%
510500 USE OF CIP FUNDS	(75,000.00)	(75,000.00)	0.00	0.00%	(977,000.00)	(977,000.00)	0.00	100.00%
CITY	**(39,906,147.00)**	**(39,906,147.00)**	**0.00**	**100.00%**	**(43,407,725.00)**	**(11,743,449.00)**	**(31,664,276.00)**	**27.05%**
189912 MISC REV/OTH FUNDS	(238.75)	(78,106.70)	77,867.95	100.00%	(100,000.00)	(20,548.48)	(79,451.52)	20.55%
180303 REBATES & REFUNDS	(30,000.00)	(30,237.78)	237.78	100.79%	(30,000.00)	(4,687.50)	(25,312.50)	15.63%
189903 DONATIONS & SP GF	(7,075.00)	(7,075.00)	0.00	100.00%	(1,105.00)	(1,105.00)	0.00	100.00%
189909 SALE OTHER EQUIP	(3,500.00)	(30,295.02)	26,795.02	865.57%	(3,000.00)	(6,340.39)	3,340.39	211.35%
189910 INSURANCE ADJUST	(127,289.54)	(141,384.78)	14,095.24	111.07%	(57,180.84)	(54,180.84)	(3,000.00)	94.75%
E RATE REIMBURSEMENT	(120,000.00)	(149,288.83)	29,288.83	124.41%	(115,500.00)	(66,479.94)	(49,020.06)	57.56%
TRANSFER IN/OUT	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00%
MISCELLANEOUS	**(288,103.29)**	**(436,388.11)**	**148,284.82**	**151.47%**	**(306,785.84)**	**(153,342.15)**	**(153,443.69)**	**49.98%**
150201 RENTS	(118,000.00)	(123,000.00)	5,000.00	104.24%	(123,000.00)	(123,000.00)	0.00	100.00%
161201 TUITION DAY SCHOOL	(110,000.00)	(84,781.17)	(25,218.83)	77.07%	(110,000.00)	(43,387.82)	(66,612.18)	39.44%
161206 TUITION ADULT	(18,000.00)	(33,115.78)	15,115.78	183.98%	(11,000.00)	(8,632.50)	(2,367.50)	78.48%
161207 TUITION SUMMER SCH	(25,000.00)	(150.00)	(24,850.00)	0.60%	(25,000.00)	0.00	(25,000.00)	0.00%
161202 SPEC PUPIL FEES	(40,000.00)	(31,816.32)	(8,183.68)	79.54%	(40,000.00)	(9,611.68)	(30,388.32)	24.03%
161205 BUS RENTAL	(400,000.00)	(322,611.46)	(77,388.54)	80.65%	(325,000.00)	(206,666.96)	(118,333.04)	63.59%
190101 TUIT FM OTH CO/CY	(634,620.00)	(29,227.68)	(605,392.32)	4.61%	(634,620.00)	0.00	(634,620.00)	0.00%
161201 DUAL ENROLLMENT	(85,000.00)	(128,214.00)	43,214.00	150.84%	(125,000.00)	0.00	(125,000.00)	0.00%
PRINT SHOP	(100,000.00)	(62,165.39)	(37,834.61)	62.17%	(75,000.00)	(55,846.37)	(19,153.63)	74.46%
SCHOOL NUT UTILITIES	(98,500.00)	(95,131.14)	(3,368.86)	96.58%	(95,000.00)	(26,830.92)	(68,169.08)	28.24%
FACILITY RENTALS	(75,000.00)	(46,735.00)	(28,265.00)	62.31%	(60,000.00)	(30,847.00)	(29,153.00)	51.41%
CHARGES FOR SERVICES	**(1,704,120.00)**	**(956,947.94)**	**(747,172.06)**	**56.15%**	**(1,623,620.00)**	**(504,823.25)**	**(1,118,796.75)**	**31.09%**
150101 INTEREST-BNK DPST	**(100.00)**	**0.00**	**(100.00)**	**100.00%**	**(100.00)**	**0.00**	**(100.00)**	**100.00%**
USE OF MONEY								
LEASE PURCHASE PROCEEDS	**0.00**	**0.00**	**0.00**	**0.00%**	**0.00**	**0.00**	**0.00**	**0.00%**
DESIGNATION - ENCUMBRANCES	**(500,478.90)**	**0.00**	**(500,478.90)**	**0.00%**	**(90,304.40)**	**0.00**	**(90,304.40)**	**0.00%**
TOTAL OPERATING FUND	**(89,731,702.19)**	**(88,551,354.05)**	**(679,869.24)**	**98.68%**	**(94,259,063.24)**	**(32,915,577.87)**	**(61,253,180.97)**	**34.92%**

Original budget	$ 88,114,120.00		Original budget	$ 90,820,024.00
Fund Balance Return/Textbooks/CIP	$ 982,000.00		Prior Year Encumbrance	$ 90,304.40
Restricted Donation Received	$ 7,075.00		Restricted Donation Received	$ 1,105.00
Insurance proceeds allocated	$ 124,289.54		School Bus Proceeds from CIP	$ 977,000.00
Restricted Sale of Assets (CTE)	$ 3,500.00		Fund Balance Return	$ 2,316,449.00
Miscellaneous Revenue	$ 238.75		Insurance Proceeds	$ 54,180.84
Designation - Prior Year Encumb	$ 500,478.90		Adjusted Budget	$ 94,259,063.24
Adjusted Budget	$ 89,731,702.19			

Item: C-1

Agenda Report

From: Scott S. Brabrand, Superintendent
              Marie F. Gee, Director of Personnel

Subject: Personnel Report

Summary/Description:

The personnel recommendations for January 5 – 19, 2016, appear as an attachment to this agenda report.

Disposition: ☒ **Action**
                  ☐ **Information**
                  ☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board approve the personnel recommendations for January 5 – 19, 2016.

NAME	COLLEGE	DEGREE/ EXPERIENCE	SCHOOL/ ASSIGNMENT	EFFECTIVE DATE
NOMINATIONS, INSTRUCTIONAL PERSONNEL, 2015-2016:				
Buckhalt Nicole	Liberty University	BA / 0 yrs (Lv. 0 3)	Linkhorne Elementary Fourth Grade	1-11-16
RESIGNATIONS:				
Proffitt Jr John	VA Polytechnic Inst. & State Univ.	BA / 8 yrs (Lv. 8 4)	Information Technology IT - DART	1-15-16

Agenda Report

Date: 01/19/16

Agenda Number: F-1

Attachments: No

From: Scott S. Brabrand, Superintendent
                  Anthony E. Beckles, Sr., Chief Financial Officer

Subject: School Operating Budget: 2016-17

Summary/Description:

During the school board meeting on December 1, 2015, the school administration shared information about budget requests received from all principals and department heads as well as the superintendent's Tier 1 recommendations, which was compiled from those budget requests. School board members had questions about specific items on the Tier 1 recommendations regarding the Empowerment Academy and instructional coaches which was presented at the December 15, 2015, school board meeting.

The school administration received information relative to the governor's proposed budget and shared that information with the school board during its last meeting. The total Tier 1 budget requests amount to $3,274,225. State funding in the amount of $1,491,835 will cover some of those requests.   The school administration recommends that the school board request the additional $1,772,390 from the Lynchburg City Council. This request will fund a one percent salary increase for all staff, a salary market adjustment for all IA/TEAs, salary adjustments for all bus drivers and bus assistants, salary adjustments for custodians and some maintenance staff, and a portion of the Empowerment Academy creation costs.

Disposition: ☒ **Action**
                      ☐ **Information**
                      ☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board approve a request of an additional $1,772,390 from the Lynchburg City Council for the 2016-17 School Operating Budget.

Agenda Report

From: Scott S. Brabrand, Superintendent
             John C. McClain, Assistant Superintendent for Student Learning and Success

Subject: High School Program of Studies: 2016-2017

Summary/Description:

The school board annually reviews and approves the High School Program of Studies for the next school year. The updated version for 2016-2017 will be introduced, with the following changes recommended:

- Include letter from the Superintendent and information about the School Board (page)
- Update Dual Enrollment course information and CVCC placement test requirements
- Remove outdated diploma information and include new diploma naming and options
- Update Grade Point Average calculations to provide more clarity for 2016-2017 and new calculations starting in 2017-2018
- Provide distinctions between grade level, advanced, Advanced Placement, and dual enrollment courses
- Clarify course load, summer, and online requirements
- List LCS online courses planned for summer 2016
- Update NCAA/NAIA requirements
- Update sequential elective options
- Update the math instructional sequence options for high school
- Update English 10 and English 11 information to match writing curriculum changes
- Add new courses and descriptions, including:
    - Algebra I, Part I
    - Algebra I, Part II
    - Online PE/Health
    - Introduction to Psychology
    - Advanced Scientific Research
    - Introduction to Hospitality, Tourism, and Recreation
- Extend existing courses to another school
    - AP Computer Science Principles (added to Glass)
    - Culinary Arts classes (added to Heritage)

Agenda Report

- AP Seminar for AP Capstone Program (added to Heritage)
- Video Production (added to Glass)
- Revise semester course system to become a year course system (for most courses)

Following the school board meeting on January 5, 2016, the school administration had made several revisions to the attached High School Program of Studies. Those changes include updates to
- course numbers,
- reflect a year-based system as compared to a semester-based system, and
- proposed GPA calculations.

Additional information regarding the GPA calculations will be presented during this presentation.

Disposition: ☒ **Action**
☐ **Information**
☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board approve the High School Program of Studies for 2016-17.

A TRADITION OF EXCELLENCE FOR ALL

L C S

LYNCHBURG CITY SCHOOLS

LCS High School Program of Studies 2016 – 2017

Every child, by name, and by need, to graduation

Lynchburg City Schools
Mission Statement
Adopted August 7, 2012

School Board Approved:

A TRADITION OF EXCELLENCE FOR ALL

LCS

LYNCHBURG CITY SCHOOLS

Dear LCS Students and Parents:

The High School Program of Studies handbook contains academic information that will help in planning a course of study. We are committed to offering a wide array of courses and programs that students can choose from to help them gain full access to their future post-secondary endeavors.

Please take the time to review the information presented in this handbook. The information ranges from specific course selection options and the different academic levels, academic and post-secondary career planning, specialized LCS programs such as Early College Program, Central Virginia Governor's School, NCAA Eligibility requirements, Virginia SOL information, graduation requirements, promotion and retention guidelines, and GPA calculation criteria. Development of a comprehensive academic and career plan is best accomplished from the collaboration of students, parents, teachers, principals, and counselors. A well-developed and detailed plan will ensure the fidelity of our LCS mission statement, "Every child by Name, by Need, to Graduation," Please be in contact with your child's school counselor in order to receive support in creating an individualized plan for your child.

It is my greatest hope that we will serve you well as a student and parent apart of LCS.

Sincerely,

Dr. Scott Brabrand

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A TRADITION OF EXCELLENCE FOR ALL

LCS
LYNCHBURG CITY SCHOOLS

Lynchburg City School Board 2015-2016

Dr. Scott Brabrand
Superintendent of Schools

Ms. Mary Ann Hoss, *Chairman*
District 1

Dr. Regina T. Dolan-Sewell
District 1

Mr. Derek Polley
District 1

Ms. J. Marie Waller-*Vice Chairman*
District 2

Ms. Sharon Y. Carter
District 2

Ms. Jenny Poore
District 2

Dr. James E. Coleman
District 3

Dr. Michael J. Nilles
District 3

Mrs. Katie K.Snyder
District 3

HIGH SCHOOLS OF LYNCHBURG CITY SCHOOLS

E.C. Glass High School
2111 Memorial Avenue
Lynchburg, VA 24501
Phone: (434) 515-5370
Dr. Tracy Richardson, Principal

Heritage High School
3020 Wards Ferry Road
Lynchburg, VA 24502
Phone: (434) 515-5400
Mr. Timothy Beatty, Principal

Fort Hill Community School
1350 Liggates Road
Lynchburg, VA 24502
Phone: (434) 515-5150
Ms. Cathy Viar,
Supervisor of Secondary Alternative Education

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TABLE OF CONTENTS

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GENERAL INFORMATION

INTRODUCTION

The following pages contain the school division's graduation requirements and a listing of all courses in the high school curriculum. This listing contains course titles, course numbers, grade(s) in which students may select a particular course, the semester(s) each course will be taught, course credit value, prerequisites, and a brief description of each course. Except for several career-technical courses, the same courses are available in both schools. Whether or not a particular course is actually taught, however, depends upon the number of students enrolling in that course. All students who have successfully completed high school courses in middle school receive credit toward graduation as well as credit toward satisfying particular subject area requirements. The courses most typically falling into this category in Lynchburg City Schools are advanced Algebra I, advanced earth science, and the foreign languages. These courses, as well as any other traditional high school courses that may be taken for credit in middle school, are included in a student's high school Grade Point Average (GPA).

GIFTED EDUCATION

The high school program for gifted education is designed to serve those students who are gifted in the area of specific academic aptitude. The program is provided through course offerings listed in the program of studies under the heading of Advanced and Advanced Placement Courses. These courses offer students an opportunity to accelerate their program as well as provide an enriched and in-depth classroom experience. Any interested student may enroll in one or more of these courses as long as he or she has successfully completed any prerequisites. The Lynchburg City Schools also participates in the regional Central Virginia Governor's School (CVGS) for Science and Technology and the state-sponsored Summer Governor's School programs. These programs provide unique opportunities for gifted students to pursue special areas of interest. Students and their parents are encouraged to contact their counselor to learn more about these programs and the opportunities they provide. Course offerings for CVGS are included in another section of this program of studies.

SPECIAL EDUCATION

Special education programs and services are available to students with disabilities. The special education services are provided based on an individualized education plan which is developed by a student's parent(s) and a school-based instructional team. When a parent, teacher, or counselor suspects a student is disabled, a referral is processed through the building principal to the school-based child study committee. Upon receipt of a referral, the child study committee meets within 10 working days. If the child study committee suspects the child may have a disability, a comprehensive evaluation is completed after securing parent written permission to evaluate. Placement in a special education program or class is contingent on the results of extensive diagnostic testing and assessment as well as the decision of a school-based eligibility committee's review of the assessment results and the eligibility criteria set forth in the Regulations Governing Special Education Programs in Virginia.

Students with disabilities shall be eligible to receive a Standard Diploma, Advanced Studies Diploma or Advanced Studies Diploma with Lynchburg Honors Seal upon earning the units of credit prescribed and by passing the Standards of Learning Tests. In addition, students entering the ninth grade between 2000-2012 may earn the Modified Standard Diploma. Beginning with the 2013-14 Freshman class, the Modified Standard Diploma will be folded into the Standard Diploma, and the Board of Education will establish, through guidelines, credit accommodations for students with disabilities. The Applied Studies Diploma is also an option for students with disabilities. Requirements for these diplomas are described in a later section of this program of studies.

ALTERNATIVE AND ADULT EDUCATION PROGRAM INFORMATION

Lynchburg City Schools offers a variety of alternative programs available to students on an individual basis. These programs include the Fort Hill Community School, the Empowerment Academy (proposed to open in 2016-17), the homebound programs, RODEO (Reach Out to Develop Educational Opportunities) and other pre-General Educational Development (GED) certificate programs. Students in an alternative program completing requirements for a diploma will only be eligible to participate in the Fort Hill Community School graduation.

Grading Scale

All courses follow a nine-week grading period. Credits are earned on a semester and/or yearly basis. The following grading scale will be used in grade levels 9-12 for all students:

A = 90 – 100
B = 80 – 89
C = 70 – 79
D = 60 – 69
F = 59 and below

NOTE: A student must be enrolled in a LCS for four full semesters in order to be eligible for 1st and 2nd graduate designation (valedictorian or salutatorian).

Differences between Grade Level, Advanced, Advanced Placement, and Dual-Enrollment Courses - Courses are offered at different levels of difficulty beyond the grade level content in order to provide students opportunities for challenging their learning and growing at a more rapid pace. The following provide general differences between the course types. In some cases, additional information is provided in the specific course descriptions:

Grade Level Course – Course content is at the level of rigor of the Standards of Learning or the defined curriculum (for courses that are not included in the Virginia Standards of Learning). More individualized support is often provided.

Advanced Course – Course content includes the rigor of SOLs while also requiring additional content and deeper application of the content. Assignments may include additional work that may also require more self-direction by the student.

Advanced Placement Course – Course content is rapidly paced with additional depth that can require student research and analysis on independent assignments. Lessons are often more complex, abstract, and open-ended than other courses. The course content aligns with the prescribed content by the College Board, which develops and oversees Advanced Placement curriculum.

Dual-Enrollment Course – Dual-enrollment courses align with course curriculum for CVCC. See page 57 for more information.

GRADE POINT AVERAGE (GPA) CALCULATIONS

The Grade Point Average (GPA) calculation is a way to quantify the overall academic achievement of a student in a single number. The GPA calculation is used for ranking graduating students and is often requested on applications for awards, recognitions, certain memberships or positions, and on college applications. This value is determined by the grades a student earns and by the level of difficulty of the courses taken.

In the Lynchburg City Schools, there are three levels of courses, and each allocates a different number of quality points for a given grade. For most classes, an "A" is worth 4 points, a "B" is worth 3 points, a "C" is worth 2 points, a "D" is worth 1 point, and an "F" is worth zero points. If a student takes an advanced level course, an additional 0.5 points is added to any grade earned above an "F". If a student takes an Advanced Placement (AP) course (or identified Dual Enrollment courses or CVGS courses), an additional full point is added to any grade earned above an "F".

Quality Points Per Full Year Credit

Advanced Placement, CVGS, and Dual Enrollment Courses in Core Content Areas	Advanced Courses and Specified Dual Enrollment Courses	All Other
A – 5	A – 4.5	A – 4
B – 4	B – 3.5	B – 3
C – 3	C – 2.5	C – 2
D – 2	D – 1.5	D – 1
F – 0	F – 0	F – 0

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Calculating the Grade Point Average (GPA)

During the 2016-2017 school year, LCS will begin the process of transitioning to a new method of calculating the GPA. The new GPA, when fully implemented, will be calculated as follows:

- An "Adjusted GPA" will be calculated for purposes of class rank. The calculation will be made by dividing the sum of quality points by the number of credits.
  - This calculation will be adjusted if a student exceeds a threshold of the number of course points above 4.0. The maximum number of quality points above a 4.0 for a course that can count in the Adjusted GPA is:
    - 1.5 points from middle school
    - 2.5 points in 9th grade
    - 3.5 points in 10th grade
    - 4.0 points in 11th grade
    - 5.0 points in 12th grade
  - If a student is taking six graded classes as a full load and has a GPA for the year that is above a 4.0, then that student's Adjusted GPA calculation includes adding a 4.0 to the year's courses and dividing by 7 courses.
  - A student must be taking a full load of courses each year to be considered for class rank honors. Special exceptions require approval by the principal and assistant superintendent.
  - Courses taken during the summer count in the GPA for the school year beginning that fall.
- An "Unadjusted GPA" will also be calculated for each student. This calculation will simply be the sum of quality points divided by the number of credits. The Unadjusted GPA will not be used for class rank purposes, but can be displayed on a student's transcript and used for purposes such as applications for scholarships.

The new GPA calculations will be implemented according to the following timeline:
- For students who are in 10th grade or younger in the 2016-2017 school year, the new Adjusted GPA and Unadjusted GPA calculations will be applied to all high school credits earned in the 2016-2017 school year and beyond. Credits earned prior to the 2016-2017 school year will be calculated as they had been under the previous GPA.
- For students who are in 11th or 12th grade in the 2016-2017 school year, the previous GPA calculations will be used for all prior and future high school credits.

Description of the Previous GPA Calculation
To calculate the GPA for a given semester or year, the following approach is used **if all of the classes are regular-weighted classes (no advanced or AP courses) or if there are fewer than seven classes taken:** Total the Quality Points (QP) earned for the grade in each class. Divide this sum by the number of classes taken. For example, if a student had 7 graded classes and earned four "A's" and three "B's," the calculation would be 4+4+4+4+3+3+3 = 25 Total Quality Points which, when divided by seven total classes, yields a GPA of 3.57.

To calculate the GPA for a given semester or year, the following approach is used **if there are seven courses and at least one of them is a course weighted above 4.0 (e.g. advanced, Advanced Placement):**
Total the Quality Points earned for the grade in each class, using the chart above for each course weighting. Divide this sum by the number of classes taken. For example, if a student had seven graded classes, with one being an AP course and two being advanced courses, and earned all A's, the calculation would be 5+4.5+4.5+4+4+4+4 = 30 total Quality Points which, when divided by seven total classes yields a GPA of 4.29. However, there is one additional step.

A formula adjustment was created in the previous decade when there were only six required courses per semester with an option for a seventh course that was an elective. An additional component was added to the formula to neutralize the impact on the GPA of choosing a seventh course as an elective. To calculate the additional component, add the Extra Quality Points (the .5 or 1.0 values for courses that are weighted above 4.0) and divide by 42. In this example, there are Extra Quality Points of 1.0 for the one AP course and two 0.5 points for the two advanced courses, which equals 2.0 Extra Quality Points. This is then divided by 42, which equals .05. This .05 is added to the 4.29 calculated above to yield a GPA of approximately 4.34.

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ADVANCED PLACEMENT (AP) COURSES OFFERED THROUGH LCS

As mentioned previously, due to the rigor and work load, all of these AP courses are weighted at 5.0 quality points for an "A." All students completing Advanced Placement (AP) courses must take the associated AP exams in May. **If a student is unable to participate in the AP exam for a course, that course will be recognized on the student's transcript as an advanced level course (weighted at 4.5 rather than 5.0 quality points) and the student must sit for the corresponding final exam (unless a senior exam exemption applies) and that exam will constitute 10% of the student's final grade for the course. In the case of extreme extenuating circumstances, appeals to this practice may be submitted to the assistant superintendent of curriculum and instruction.**

- All Governor's School courses
- Any dual enrollment courses in math, science, social studies, and English
- Advanced Placement Language/Composition
- Advanced Placement Literature
- Advanced Placement American History
- Advanced Placement World History
- Advanced Placement European History
- Advanced Placement Micro and Macro Economics
- Advanced Placement Calculus AB
- Advanced Placement Calculus BC
- Advanced Placement Statistics
- Advanced Placement Latin (Vergil)
- Advanced Placement Spanish Language V
- Advanced Placement French Language V
- Advanced Placement German Language V
- Advanced Placement American Government
- Advanced Placement Comparative Government
- Advanced Placement Human Geography
- Advanced Placement Chemistry
- Advanced Placement Physics I & II
- Advanced Placement Biology
- Advanced Placement Art History
- Advanced Placement Portfolio Art
- Advanced Placement Music Theory
- Advanced Placement Psychology
- Advanced Placement Computer Science
- Advanced Placement Environmental Science
- Other courses as noted in Edgenuity and in the current Virtual Virginia On-Line Program brochure
- Advanced Placement Seminar
- Advanced Placement Research
- Advanced Teachers for Tomorrow

DUAL ENROLLMENT COURSES

The dual enrollment program with Central Virginia Community College allows students who are enrolled in certain courses in the high schools to receive both high school and college credit. All dual enrollment core content courses and electives are weighted at 5.0 quality points. Dual enrollment courses in career and technical fields are weighted at 4.5 quality points. The College Success Skills course is weighted at 4.0 quality points. Student interest defines which courses will be taught on a yearly basis. Students enrolled in these courses may earn college credit from CVCC by fulfilling course requirements and complete the course with a grade of C or better. **Students must qualify for enrollment for these courses by taking the CVCC placement test or by ACT/SAT qualifying scores a semester prior to enrollment within dual enrollment course for admission approval.** The costs for required textbooks for dual enrollment courses will remain the responsibility of the school division. There is no tuition charged for dual enrollment classes taught in high schools. For more information, please contact the appropriate counselor at your student's school.

ADVANCED COURSES OFFERED THROUGH LCS

The following courses are at an advanced level. Due to the rigor and work load, all of these courses are weighted at 4.5 quality points for an "A." Some courses are weighted at 5.0 quality points and are noted with an asterisk (*).

- Governor's School courses as noted in the program
- Advanced World Literature & Composition I
- Advanced World Literature & Composition II
- Advanced American & World Literature & Composition
- Advanced English Literature & Composition
- Advanced Composition (Dual Enrollment)*
- Advanced Algebra in the 8th grade
- Advanced Earth Science in the 8th grade
- Advanced Algebra II
- Advanced Geometry with Trigonometry
- Advanced Math Analysis
- Advanced Pre-Calculus/Applied Calculus (Dual Enrollment)*
- Advanced Chemistry
- Advanced Biology
- Advanced College Biology (Dual Enrollment)*
- Advanced World History & Geography I (to 1500 AD)
- Advanced World History & Geography II (1500 AD to Present)
- Advanced American History
- Advanced U.S. Government
- Advanced French IV
- Advanced Spanish IV
- Advanced German IV
- Advanced Latin Literature
- Advanced Studio Art
- Advanced Building Trades II/Carpentry I (Dual Enrollment)
- Advanced Computer Systems Technology II/PC Repair I (Dual Enrollment)
- Advanced Precision Machining II/Machine Tools I (Dual Enrollment)
- Advanced Robotic Work/Cell Technology (Dual Enrollment)
- Advanced Early Childhood Education II (Dual Enrollment)
- Advanced Culinary Arts (Dual Enrollment)

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VIRTUAL VIRGINIA ADVANCED PLACEMENT (AP) COURSES
http://www.virtualvirginia.org

In addition to the AP courses offered locally, the Lynchburg City Schools' high schools recognize and participate in Virginia's VIRTUAL AP SCHOOL. Students may participate in these distance learning courses if students meet all prerequisite and eligibility criteria, including prior approval by the high school principal. If students are enrolled in AP virtual courses, then students must take the associated exams in May. These virtual AP courses are graded and weighted at a 5.0 for an A (just as other AP courses are), and they are equivalent in rigor and work load to on-site AP courses, however, not all virtual courses are at the advanced placement level. Students who are most successful in online or televised courses are those who can work independently with minimum supervision, have good time management skills, and a strong desire to learn. A successful online student can stay on task and maintain a regular schedule of logging on and keeping up with the readings, course assignments, homework, and other expectations. Interested students should contact their counselor for more information.

Criteria for Participation
1. Typically, it is mostly juniors or seniors that choose to be scheduled into Virtual AP courses. Students below the junior grade level may enroll in a Virtual course, including AP courses, with permission from the guidance counselor and principal.
2. Only students who have completed any and all prerequisites listed for the course in the Lynchburg City Schools High School Program of Studies will be scheduled into a Virtual AP course.
3. Students will typically only be scheduled into Virtual AP courses for which a section of that same course is not being offered in the high school that year. Exceptions can be made by the principal.
4. Students will be scheduled into only one Virtual AP course during a period.
5. Students will be scheduled into Virtual AP courses during the seven defined periods during the regular school day.
6. Students will not be scheduled into any Virtual AP courses if it would cause them to then have more than seven courses in a given year.
7. **The student must obtain written prior approval by the high school principal for any Virtual Virginia course.**
8. Students who enroll in Virtual Virginia courses and withdraw after 21 calendar days must pay the State administrative withdrawal fee of $75.00.

NON-WEIGHTED VIRTUAL VIRGINIA COURSES
These are non-weighted courses available as well. The following distance learning courses are weighted at 4.0:

- World Mythology (4410AD)
- Creative Writing (1310AD)
- Psychology (3430AD)
- Arabic I (1410AD)
- Chinese I (1420AD)

Additional Information: After three weeks from the start of the course, students will only be allowed to drop the course per the Virtual Virginia guidelines. They will complete the course and the grade that they earn will be transcribed and included in their GPA calculation. The counselor at each school will provide the parents of students being scheduled into a Virtual course with all the information noted in this section.

In addition, both the student and the parent will be required to sign a form indicating that they understand the rigor of the courses, the nature of the instruction, the need for the student to be self-motivated and self-monitoring, and the specifics of the "drop/withdrawal"
period. The counselor at each school will contact the parents of each student enrolled in a Virtual course prior to the end of the first three weeks of the course in order to remind them of the deadline for dropping the course.

Please note that a "D," indicating distance learning, will be at the end of each of the Virtual AP course numbers. In some cases this will be the only difference between the on-site AP course number and the Virtual AP course number. AP Human Geography 4459AD (and BD) is not available in the LCS High School Program of Studies. Students may enroll in online AP courses due to scheduling conflicts or low enrollment. Interested students should contact their school counselor for more information.

If you have any questions about non-weighted or advanced placement courses available through Virtual Virginia, please visit the Virtual Virginia website: **http://www.virtualvirginia.org**. For questions regarding eligibility requirements, please contact your counselor.

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SUMMER COURSES

Courses taken during the summer do not count toward the maximum course load during the fall and spring semesters. Any course taken during the summer that is online must be completed by the summer deadline as prescribed by the school principal.

The following online courses are planned to be offered through LCS for summer 2016.

Personal Finance & Economics (10-12th)   Health/PE 9 Online

INDEPENDENT STUDY COURSES

Independent study courses provide an opportunity for conscientious and mature students to schedule a course which they otherwise would not be able to take. These courses are scheduled individually, and they require the participation of a certified instructor and the prior approval of the principal. The instructor must meet with the student at least once a week, and the student must complete all work and tests assigned. **All independent study courses are graded pass/fail.** The student will receive credit for the course, and the course will appear on the student's transcript, but the course will be graded Pass/Fail and will not count in the cumulative GPA. The student could still receive college credit by obtaining an acceptable score on the AP exam. Course numbers used for independent study courses include the following: Acting (7310A, 7310B); Technical Theater (7320A, 7320B); Art (7330A, 7330B); Mathematics (7220A, 7220B); English (7210A, 7210B); Social Studies (7240A, 7240B); Science (7230A, 7230B); Foreign Language (7250A, 7250B); Music (7340A, 7340B); Technology (7350A, 7350B), and Physical Education (7590A, 7590B, 7510A, 7501B). A successful online student can stay on task and maintain a regular schedule of logging on and keeping up with the readings, course assignments, homework, and other expectations. Interested students should contact their school counselor for more information.

WITHDRAWAL FROM A COURSE BEFORE THE END OF THE SEMESTER

All requests for a student to be withdrawn from a course shall be made in writing, signed by a parent/guardian, and turned in to the guidance department by the end of the 15th school day of the semester. If a student is withdrawn after the 15th school day of the semester, the student's transcript will reflect the course and a grade of withdrawal passing (WP) or withdrawal failing (WF) for the semester. These designations (WP and WF) are not considered in Grade Point Average calculations. A parent/guardian must file a written request for such consideration with the building principal, and that request must clearly indicate the extenuating circumstances to justify a withdrawal. For additional procedures, please refer to Lynchburg City School Board Policies and Administrative Regulations 6-58.

PROMOTION AND COURSE LOAD

According Lynchburg City School Board Policies and Administrative Regulations Policy 7-25 <u>Promotion, Retention, Acceleration</u> high school credit requirements for promotion are as follows:

9-10 grades (4 credits)
10-11th grades (9 credits)
11-12th grades (15 credits)

On April 16, 2010, the school board approved revisions to P 7-24 <u>Student Course Load</u> that states students in grades 9-11 must carry the equivalent of six credit-bearing courses and must elect to carry another approved course, a repeat course, or a study hall in seventh period. All students in grade twelve (senior students) must carry the equivalent of four credit-bearing courses. Unless a waiver is granted, senior students must also carry other approved courses, repeat courses, or study halls in the other three periods. Senior students for whom a waiver is granted may be dismissed from school after the fourth, fifth, or sixth period. Transportation from school to home will not be provided for students who are dismissed early. For additional information, please contact your appropriate school counselor.

GRADUATION REQUIREMENTS

The *Regulations for Establishing Standards for Accrediting Public Schools in Virginia* specifies the standards that all students must meet in order to earn the Applied Studies Diploma, the Modified Standard Diploma, the Standard Diploma, and the Advanced Studies Diploma. These standards can be changed from one year to another, and each student must meet the requirements in place the year he or she first entered the ninth grade. There are additional local requirements to earn the Advanced Studies Diploma with a Lynchburg Honors Seal.

The following Requirements are in effect for <u>students entering ninth grade for the first time in the fall of 2013 and beyond.</u> (Any students who entered 9th grade for the first time prior to fall of 2013, please see school counselor for requirements.)

STANDARD DIPLOMA (Entering 9th Grade for first time in the fall of 2013 or beyond)

Discipline Area	Standard Units of Credit Required	Verified Credits Required
English	4	2
Mathematics[1]	3	1
Laboratory Science [2,6]	3	1
History and Social Sciences [3,6]	3	1
Health and Physical Education	2	
Foreign Language, Fine Arts or Career and Technical Education [7]	2	
Economics and Personal Finance	1	
Electives [4]	4	
Student Selected Tests [5]		1
Career and Technical Education Credential [8]		
Total [9, 10]	22	6

[1]Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I, Geometry, Algebra, Functions, and Data Analysis, Algebra II, or other mathematics courses above the level of Algebra II. The board shall approve courses to satisfy this requirement. If taken, Algebra, Functions, and Data Analysis must be completed before Algebra II to meet this requirement.

[2]Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines: earth sciences, biology, chemistry, or physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma. The board shall approve courses to satisfy this requirement.

[3]Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and one course in either world history or geography or both. The board shall approve courses to satisfy this requirement.

[4]Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

[5]A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics or other areas as prescribed by the board in 8VAC20-131-110.

GRADUATION REQUIREMENTS (continued)

[6]Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association, or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (i) the student-selected verified credit and (ii) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board of Education as an additional test to verify student achievement.

[7]Pursuant to § 22.1-253.13:4 of the Code of Virginia, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education.

[8]Students shall earn a career and technical education credential approved by the Board of Education that could include, but not be limited to, the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.

[9]Students shall successfully complete one virtual course, which may be a noncredit-bearing course or a required or elective credit-bearing course that is offered online.

[10]For students with IEPs or 504 Plans, the Board of Education shall establish, through guidelines, credit accommodations to the standard and verified credit requirements for a Standard Diploma. The student's Individual Education Program (IEP) or 504 Plan would specify any credit accommodations that would be applicable for the student.

SEQUENTIAL ELECTIVES REQUIREMENT

Students earning the Applied Studies Diploma must successfully complete two sequential electives to satisfy graduation requirements. Courses used to satisfy this requirement may be in any discipline as long as the courses are not specifically required for graduation. Courses used to satisfy the one-credit requirement in the fine arts or career and technical education **may also** be used to partially satisfy this requirement. For example, if a student selects Art I to satisfy the fine arts or career and technical education requirement, then Art I and a second course in the art sequence **may also** be used to satisfy the sequential electives requirement. The second course could then also count toward the six other required elective credits. Courses to satisfy the sequential elective requirement do <u>not</u> have to be completed in consecutive years, and they may be semester or year-long courses. Exploratory courses may <u>not</u> be used to meet the sequential elective requirement, but introductory courses <u>may</u> be used. **Specifically approved sequences of courses meeting this requirement can be found on pgs. 17-19 of this document.** Questions regarding sequential electives may be directed to the counselor of your student's school.

VERIFIED CREDITS

To receive a standard diploma, students must pass six Standards of Learning (SOL) tests. Students entering ninth grade after 2003-04 must pass English: Reading/Literature/Research, English: Writing, one math, one science, one history/social studies, and one other SOL test or substitute test. All students seeking an advanced studies diploma must pass nine Standards of Learning (SOL) tests including the 2 English, 2 math, 2 science, 2 history, and one other.

LOCALLY AWARDED VERIFIED CREDIT OPTION

The current *Regulations for Establishing Standards for Accrediting Public Schools in Virginia* provide for locally awarded verified credits in science and history/social studies for students in the ninth grade class of 2003-2004 and beyond who are working toward a standard diploma (8 VAC 20-131-110 B.3).

A verified credit is received when a student passes a high school credit course and the associated Standards of Learning (SOL) end-of-course state test. A locally awarded verified credit is an option available for some students who pass a science or history/social studies class but do not pass the associated SOL end-of-course test and do not have enough verified credits to graduate with a standard diploma. Locally awarded verified credits apply only to the standard diploma. No locally awarded verified credit may be used for the advanced studies diploma. Locally awarded verified credits apply only to science and history/social studies. No locally awarded verified credits are available for math, reading, or writing.

To be eligible to earn a local verified credit in science or history/social studies, a student must:
- pass the high school course but not pass the associated state SOL end-of-course test,
- score at least 375 on any administration of the SOL test having taken the test at least twice,
- be working toward a standard diploma, and
- demonstrate achievement in the academic content through a local appeal process.

GRADUATION REQUIREMENTS (continued)

The appeal process in Lynchburg includes the following:

- A school-based panel will review grades of students eligible for a local verified credit. A local verified credit will be awarded if a student has achieved a final grade of "C" or better for the science or history course.
- Students eligible for a local verified credit who receive a "D" in the science or history course will receive a local verified credit if they receive a grade of "C" or higher on the exam.
- Students not meeting one of the above criteria may review course content and complete a released SOL test. Once they receive a perfect score on the released test, they are eligible for a locally verified credit. Students may use notes when completing the released test. This option is available until the student scores 100%.
- The school-based panel has final authority in determining whether to (a) award the verified credit, (b) deny the verified credit, or (c) suggest participation in a remedial program followed by retesting. Any appeals regarding locally awarded verified credits should be directed to the assistant superintendent of curriculum and instruction.

NOTE: Students with disabilities who qualify for credit accommodations may be awarded local verified credits in any subject area if they meet the criteria above. Any students who entered 9th grade for the first time prior to fall of 2013, please see school counselor for requirements.

ADVANCED STUDIES DIPLOMA (Entering 9th grade in fall of 2011 or later)

Discipline Area	Standard Units of Credit Required	Verified Credits Required
English	4	2
Mathematics[1]	4	2
Laboratory Science[2]	4	2
History and Social Sciences[3]	4	2
Foreign Language[4]	3	
Health and Physical Education	2	
Fine Arts or Career and Technical Education	1	
Economics and Personal Finance	1	
Electives	3	
Student Selected Test[5]		1
Total[6]	26	9

1. Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. If taken, Algebra, Functions, and Data Analysis must be completed before Algebra II to meet this requirement.

2. Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics.

3. Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and two courses in either world history or geography or both.

4. Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

5. A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education, economics, or other areas as prescribed by the board in 8 VAC 20-131-110.

6. **Beginning with the ninth grade class of 2013-2014, students shall successfully complete one virtual course, which may be a noncredit-bearing course, or may be a course required to earn this diploma that is offered online.**

*NOTE: Any students who entered 9th grade for the first time prior to fall of 2011, please see a school counselor for requirements.

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GRADUATION REQUIREMENTS (continued)

ADVANCED STUDIES DIPLOMA WITH LYNCHBURG HONORS SEAL
(all students)

Students who wish to earn the Advanced Studies Diploma with Lynchburg Honors Seal must meet all the course and verified credit requirements for the Advanced Studies Diploma. In addition, they must meet the following additional criteria:

1) English must include a minimum of six semesters in courses designed for students with above average skills in reading and writing. Four of these semester courses must be taken during the junior and senior years.
2) The four math credits must include Algebra 1 and three credits above the level of Algebra I. The minimum must include progress through trigonometry/functions.
3) Science credits must include choices from Earth Science, Biology I, Biology II, Anatomy and Physiology, Biology II, Ecology, chemistry, physics, AP Chemistry, AP Physics, AP Biology, and Dual Enrollment Biology.
4) Social studies credits must include Advanced World History and Geography I (to 1500 AD), Advanced World History and Geography II (1500 AD to Present) or AP World History, Advanced American History, AP American History, Advanced U.S. Government or AP Government, AP European History, and AP Microeconomics and Macroeconomics.
5) Students must take and pass at least two advanced placement or dual enrollment courses (or one of each) in different content areas during the senior year. These courses may be in English, Math, Science, or Social Studies.

APPLIED STUDIES DIPLOMA

Students identified with disabilities who complete the requirements of their individualized education programs shall be awarded special diplomas by local school boards if they do not fulfill any other diploma requirements.

CERTIFICATE OF PROGRAM COMPLETION

Students who have completed a prescribed course of study as defined by the local school board shall be awarded certificates by local school boards if the students do not qualify for diplomas. This is NOT a high school diploma.

AWARDS FOR EXEMPLARY PERFORMANCE

Students who complete the requirements for a diploma may be eligible for the following seals if they meet the requirements as defined in the *Regulations Establishing Standards for Accrediting Public Schools in Virginia*:

1. Students who complete the requirements for an Advanced Studies Diploma with an average grade of "B" or better and successfully complete college-level coursework that will earn the student at least nine transferable college credits in Advanced Placement (AP), or dual enrollment courses shall receive the **Governor's Seal** on the diploma.

2. Students who complete the requirements for a Standard Diploma or Advanced Studies Diploma with an average grade of "A" shall receive a **Board of Education Seal** on the diploma.

3. The Board of Education's **Career and Technical Education Seal** will be awarded to students who earn a Standard or Advanced Studies Diploma <u>and</u>
    a. complete a prescribed sequence of courses in a career and technical education concentration or specialization
       that they choose and maintain a "B" or better average in those courses; <u>or</u>
    b. pass an examination or an occupational competency assessment in a career and Virginia Department of
       Education technical education concentration or specialization that confers certification or occupational
       competency credential from a recognized industry, trade or professional association <u>or</u>
    c. acquire a professional license in that career and technical education field from the Commonwealth of Virginia.
       The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.

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AWARDS FOR EXEMPLARY PERFORMANCE (continued)

4. The Board of Education's **Seal of Advanced Mathematics and Technology** will be awarded to students who earn either a Standard or Advanced Studies Diploma <u>and</u> satisfy all of the mathematics requirements for the Advanced Studies Diploma (four units of credit including Algebra II; two verified units of credit) with a "B" average or better; <u>and</u> <u>either</u>
    a. pass an examination in a career and technical education field that confers certification from a recognized

       industry, or trade or professional association; <u>or</u>
    b. acquire a professional license in a career and technical education field from the Commonwealth of Virginia; <u>or</u>
    c. pass an examination approved by the board that confers college-level credit in a technology or computer

       science area. The Board of Education shall approve all professional licenses and examinations used to satisfy

       these requirements.

5. The Board of Education's **Seal for Excellence in Civics Education** will be awarded to students who earn either a Standard or Advanced Studies Diploma <u>and</u>: (i) complete Virginia and United States History and Virginia and United States Government courses with a grade of "B" or higher; <u>and</u>, (ii) have good attendance and no disciplinary infractions as determined by local school board policies <u>and</u>, (iii) complete 50 hours of voluntary participation in community service or extracurricular activities. Activities that would satisfy the requirements of clause (iii) of this subdivision include:
    a. volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate;
    b. participating in Boy Scouts, Girl Scouts, or similar youth organizations;
    c. participating in JROTC;
    d. participating in political campaigns or government internships, or Boys State, Girls State, or Model General

       Assembly;
    e. participating in school-sponsored extracurricular activities that have a civics focus.
    f. any student who enlists in the United States military prior to graduation will be deemed to have met this

       community service requirement.

6. The Board of Education's **Seal of Biliteracy** certifies attainment of a high level of proficiency by a graduating high school student in one or more languages in addition to English, and certifies that the graduate meets one of the following criteria:
    a. The Board of Education's Seal of Biliteracy will be awarded to students who earn either a Board of Education-

       approved diploma and (i) pass all required End-of-Course Assessments in English reading and writing at the

       proficient or higher level; and (ii) be proficient at the intermediate-mid level or higher in one or more languages

       other than English, as demonstrated through an assessment from a list to be approved by the Superintendent

       of Public Instruction.
    b. For purposes of this article, "foreign language" means a language other than English, and includes American

       Sign Language.

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NCAA & NAIA COLLEGE FRESHMAN ATHLETIC ELIGIBILITY STANDARDS

All potential college student-athletes must register with the NCAA Initial-Eligibility Clearinghouse and meet NCAA academic requirements. Excerpts from the Eligibility Standards are provided on this page. Please see your counselor for additional information.

Core Courses
- **NCAA Division I requires 16 core courses as of August 1, 2008**. This rule applies to any student first entering any Division I college or university on or after August 1, 2008. Please see the chart below for a breakdown of this 16 core-course requirement.
- **NCAA Division II requires 16 core courses as of August 1, 2013.** See the breakdown of core-course requirements below.

Test Scores
- **Division I** has a sliding scale for test score and grade-point average.
- **Division II** has a minimum SAT score requirement of 820 or an ACT sum score of 68.
- The SAT score used for NCAA purposes includes **only** the critical reading and math sections. The writing section of the SAT is not used.
- The ACT score used for NCAA purposes is a **sum** of the four sections on the ACT: English, mathematics, reading and science.
- **All SAT and ACT scores must be reported directly to the NCAA Eligibility Center by the testing agency. Test scores that appear on transcripts will not be used. When registering for the SAT or ACT, use the Eligibility Center code of 9999 to make sure the score is reported to the Eligibility Center.**

Grade-Point Average
- Only core courses are used in the calculation of the grade-point average.
- **Be sure** to look at your high school's list of NCAA-approved core courses on the Eligibility Center's Web site to make certain that courses being taken have been approved as core courses. The Web site is www.ncaaclearinghouse.net.
- **Division I** grade-point-average requirements are listed on the NCAA web site.
- **The Division II** grade-point-average requirement is a minimum of 2.0.

DIVISION I 16 Core-Course Rule	DIVISION II 16 Core-Course Rule
16 Core Courses:	**16 Core Courses:**
4 years of English.	3 years of English.
3 years of mathematics (Algebra I or higher).	2 years of mathematics (Algebra I or higher).
2 years of natural/physical science (1 year of lab if offered by high school).	2 years of natural/physical science (1 year of lab if offered by high school).
1 year of additional English, mathematics or natural/physical science.	3 years of additional English, mathematics or natural/physical science.
2 years of social science.	2 years of social science.
4 years of additional courses (from any area above, foreign language or nondoctrinal religion/philosophy).	**4** years of additional courses (from any area above, foreign language or nondoctrinal religion/philosophy).

PLEASE NOTE: Beginning August 1, 2013, students planning to attend an NCAA Division II institution will be required to complete 16 core courses.

OTHER IMPORTANT INFORMATION:
Students enrolling at an NCAA Division I or II institution for the first time need to complete the amateurism questionnaire through the Eligibility Center Web site. Students need to request final amateurism certification prior to enrollment.

For more information regarding the rules, please go to **www.ncaa.org** . You should click on "Academics and Athletes" then "Eligibility and Recruiting." You can also visit the Eligibility Center Web site at **www.ncaaclearinghouse.net** .

You can also call the NCAA Eligibility Center if you have questions. The toll-free number is 877-262-1492.

NAIA
Graduate from high school and also meet two out of three of the following requirements:
• Achieve a minimum of 18 on the ACT or 860 on the SAT
• Achieve a minimum GPA of 2.0
• Graduate in the top half of the senior class

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NCAA Divisions I and II Initial-Eligibility Requirements

Core Courses

- **NCAA Division I requires 16 core courses**. **NCAA Division II currently requires 14 core courses.**
  Division II will require 16 core courses for students enrolling on or after August 1, 2013. See the charts below.

- **NCAA Division I will require 10 core courses** to be completed **prior to the seventh semester** (seven of the 10 must be a combination of English, math or natural or physical science that meet the distribution requirements below). These 10 courses become "locked in" at the seventh semester and cannot be retaken for grade improvement.
  - ➢ *Beginning August 1, 2016, it will be possible for a Division I college-bound student-athlete to still receive athletics aid and the ability to practice with the team if he or she fails to meet the 10 course requirement, but would not be able to compete.*

Test Scores

- **Division I** uses a sliding scale to match test scores and core grade-point averages (GPA). The sliding scale for those requirements is shown on Page No. 2 of this sheet.
- **Division II** requires a minimum SAT score of 820 or an ACT sum score of 68. (After August 1, 2018 use sliding scale to match test scores and core GPA)
- The SAT score used for NCAA purposes includes **only** the critical reading and math sections. The writing section of the SAT is not used.
- The ACT score used for NCAA purposes is a **sum** of the following four sections: English, mathematics, reading and science.
- **When you register for the SAT or ACT, use the NCAA Eligibility Center code of 9999 to ensure all SAT and ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. Test scores that appear on transcripts will not be used.**

Grade-Point Average

- **Be sure** to look at your high school's List of NCAA Courses on the NCAA Eligibility Center's website (www.eligibilitycenter.org). Only courses that appear on your school's List of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.
- **Division I** students enrolling full time **before August 1, 2016**, should use Sliding Scale A to determine eligibility to receive athletics aid, practice and competition during the first year.
- **Division I** GPA required to receive athletics aid and practice **on or after August 1, 2016,** is 2.000 (corresponding test-score requirements are listed on Sliding Scale B on Page No. 2 of this sheet).
- **Division I** GPA required to be eligible for competition **on or after August 1, 2016,** is 2.300 (corresponding test-score requirements are listed on Sliding Scale B on Page No. 2 of this sheet).
- **The Division II** core GPA requirement is a minimum of 2.000. After August 1, 2018, core GPA required minimum 2.2 GPA.
- Remember, the NCAA GPA is calculated using NCAA core courses only.

Division I 16 Core Courses	Division II 16 Core Courses (2013 and After)
4 years of English.	3 years of English.
3 years of mathematics (Algebra I or higher).	2 years of mathematics (Algebra I or higher).
2 years of natural/physical science (1 year of lab if offered by high school).	2 years of natural/physical science (1 year of lab if offered by high school).
1 year of additional English, mathematics or natural/physical science.	3 years of additional English, mathematics or natural/physical science.
2 years of social science.	2 years of social science.
4 years of additional courses (from any area above, foreign language or comparative religion/philosophy).	4 years of additional courses (from any area above, foreign language comparative religion/philosophy).

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Sequential Electives

The following sequences are approved to meet the sequential electives requirement of the Standard Diploma or Applied Studies Diploma.

Business Management and Marketing Course sequences:

Business Law Business Management Computer Applications Keyboarding Keyboarding Applications	Followed by	Accounting I
Accounting I Computer Applications	Followed by	Accounting II
Business Law Business Management Computer Applications Keyboarding Keyboarding Applications	Followed by	Computer Information Systems
Computer Applications Computer Information Systems Keyboarding Keyboarding Applications	Followed by	Design, Multimedia & Web Technologies
Business Law Business Management Computer Applications	Followed by	Principles of Business & Marketing
Keyboarding Keyboarding Applications	Followed by	Computer Applications
Business Management Principles of Business and Marketing Sports, Entertainment & Recreation Marketing	Followed by	Marketing I
Sports, Entertainment & Recreation Marketing Marketing I	Followed by	Marketing II
Principles of Business & Marketing	Followed by	Sports, Entertainment & Recreation Marketing
Coop Tech Education I	Followed by	Coop Tech Education II
Public Speaking I	Followed by	Public Speaking II
Accelerated Reading I	Followed by	Accelerated Reading II

Communication & Information Systems Sequences:

Communication Systems	Followed by	Video & Media Technology
Exploring Computer Science	Followed by	Computer Systems Technology I
Computer Systems Technology I	Followed by	Computer Systems Technology II
Exploring Computer Science Computer Systems Technology I	Followed by	Computer Systems Technology II
Exploring Computer Science	Followed by	Advanced Computer Science Principles

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Sequential Electives (continued)

Cultural Arts

Orchestra I	Followed by	Orchestra II
Concert Band I	Followed by	Symphonic Band I
Concert Band I Symphonic Band I	Followed by	Jazz Ensemble Wind Ensemble Percussion Ensemble
Chorus I	Followed by	Chorus II
Chorus I	Followed by	Chorus III
Chorus II	Followed by	Chorus III
Art I	Followed by	Drawing Painting I Sculpture I Digital Photography and Printmaking Photography Commercial Art
Painting I	Followed by	Painting II
Sculpture I	Followed by	Sculpture II
Introduction To Theater	Followed by	Musical Theatre Dance Acting I Applied Theatre Tech I Technical Theatre I Design Technical Theatre I Production
Acting I	Followed by	Acting II
Applied Theatre Tech I	Followed by	Applied Theatre Tech II
Technical Theatre I Design	Followed by	Technical Theatre II Costuming
Technical Theatre I Production	Followed by	Technical Theatre II Costuming
Creative Writing	Followed by	Playwriting and Directing

Note: Taking Orchestra II, Concert Band I, or Chorus I twice for elective credit may fulfill the sequential elective requirement as long as the student is progressing through a set of skills outlined in the curriculum.

Foreign Languages

French I	Followed by	French II
German I	Followed by	German II
Latin I	Followed by	Latin II
Spanish I	Followed by	Spanish II

Health Sciences

Dental Careers I	Followed by	Dental Careers II
Athletic Training I	Followed by	Athletic Training II
Nurse Aide I	Followed by	Nurse Aide II

Note: Health and Medical Sciences Exploratory may not be used to partially fulfill the sequential elective requirement.

Human Services & Resources

Culinary Arts I	Followed by	Culinary Arts II
Cosmetology I	Followed by	Cosmetology II
Intro to Early Childhood	Followed by	Early Childhood I Teachers for Tomorrow
Early Childhood I	Followed by	Early Childhood II
Any JROTC Courses	Followed by	Any other JROTC Courses

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Sequential Electives (continued)

Industrial, Manufacturing & Engineering Systems

Basic Technical Drawing	Followed by	Architectural Drawing Engineering Drawing Nuclear Technology
Architectural Drawing Engineering Drawing	Followed by	Nuclear Technology
Intro to Building Trades	Followed by	Building Trades I
Building Trades I	Followed by	Building Trades II
Precision Machining I	Followed by	Precision Machining II
Intro To Auto Service Technology	Followed by	Auto Service Technology I
Auto Service Technology I	Followed by	Auto Service Technology II
Technology Foundations	Followed by	Technology Transfer

Note: Newspaper, Yearbook, Leadership Training, and SOL Review courses may <u>not</u> be used to partially fulfill the sequential elective requirement.

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TRANSFER CREDITS

The following information is taken from the *Regulations for Establishing Standards for Accrediting Public Schools in Virginia:* **8 VAC 20-131-60. A summary table of the graduation requirements for transfer students is provided at the end of this document.**

A. The provisions of this section pertain generally to students who transfer into Virginia high schools. Students transferring in grades K-8 from Virginia public schools or nonpublic schools accredited by one of the approved accrediting constituent members of the Virginia Council for Private Education shall be given recognition for all grade-level work completed. The academic record of students transferring from all other schools shall be evaluated to determine appropriate grade placement in accordance with policies adopted by the local school board.

B. For the purposes of this section, the term "beginning" means within the first 20 hours of instruction per course. The term "during" means after the first 20 hours of instruction per course.

C. Standard or verified units of credit earned by a student in a Virginia public school shall be transferable without limitation regardless of the accreditation status of the Virginia public school in which the credits were earned. Virginia public schools shall accept standard and verified units of credit from other Virginia public schools and state operated programs. Standard units of credit also shall be accepted for courses satisfactorily completed in accredited colleges and universities when prior written approval of the principal has been granted or the student has been given credit by the previous school attended.

D. A secondary school shall accept credits toward graduation received from Virginia nonpublic schools accredited by one of the approved accrediting constituent members of the Virginia Council for Private Education (VCPE). The Board of Education will maintain contact with the VCPE and may periodically review its accrediting procedures and policies as part of its policies under this section. Nothing in these standards shall prohibit a public school from accepting standard units of credit toward graduation awarded to students who transfer from all other schools when the courses for which the student receives credit generally match the description of or can be substituted for courses for which the receiving school gives standard credit, and the school from which the child transfers certifies that the courses for which credit is given meet the requirements of 8 VAC 20-131-110 A. Students transferring into a Virginia public school shall be required to meet the requirements prescribed in 8 VAC 20-131-50 to receive a Standard, Advanced Studies, or Modified Standard Diploma, except as provided by subsection G of this section. To receive a Special Diploma or Certificate of Program Completion, a student must meet the requirements prescribed by the Standards of Quality.

E. The academic record of a student transferring from other Virginia public schools shall be sent directly to the school receiving the student upon request of the receiving school in accordance with the provisions of the 8 VAC 20-150-10, Management of the Student's Scholastic Records in the Public Schools of Virginia.

F. The academic record of a student transferring into Virginia public schools from other than a Virginia public school shall be evaluated to determine the number of standard units of credit that have been earned, including credit from schools outside the United States, and the number of verified units of credit needed to graduate in accordance with subsection G of this section. Standard units of credit also shall be accepted for courses satisfactorily completed in accredited colleges and universities when the student has been given credit by the previous school attended. Students transferring above the tenth grade from schools or other education programs that do not require or give credit for health and physical education shall not be required to take these courses to meet graduation requirements.

G. Students entering a Virginia public high school for the first time after the tenth grade shall earn as many credits as possible toward the graduation requirements prescribed in 8 VAC 20-131-50. However, schools may substitute courses required in other states in the same content area if the student is unable to meet the specific content requirements of 8 VAC 20-131-50 without taking a heavier than normal course load in any semester, by taking summer school, or by taking courses after the time when he otherwise would have graduated. In any event, no such student shall earn fewer than the following number of verified units, nor shall such students be required to take SOL tests or additional tests as defined in 8 VAC 20-131-110 for verified units of credit in courses previously completed at another school or program of study, unless necessary to meet the requirements listed in subdivisions 1 and 2 of this subsection:

1. For a Standard Diploma:
   a. Students entering a Virginia high school for the first time during the ninth grade or at the beginning of the tenth grade shall earn credit as prescribed in 8 VAC 20- 131-50;
   b. Students entering a Virginia high school for the first time during the tenth grade or at the beginning of the eleventh grade shall earn a minimum of four verified units of credit: one each in English, mathematics, history, and science. Students who complete a career and technical education program sequence may substitute a certificate, occupational competency credential or license for either a science or history and social science verified credit pursuant to 8 VAC 20-131-50; and
   c. Students entering a Virginia high school for the first time during the eleventh grade or at the beginning of the twelfth grade shall earn a minimum of two verified units of credit: one in English and one of the student's own choosing.

TRANSFER CREDITS (continued)

2. For an Advanced Studies Diploma:

    a. Students entering a Virginia high school for the first time during the ninth grade or at the beginning of the tenth grade shall earn credit as prescribed in 8 VAC 20- 131-50;

    b. Students entering a Virginia high school for the first time during the tenth grade or at the beginning of the eleventh grade shall earn a minimum of six verified units of credit: two in English and one each in mathematics, history, and science and one of the student's own choosing; and

    c. Students entering a Virginia high school for the first time during the eleventh grade or at the beginning of the twelfth grade shall earn a minimum of four verified units of credit: one in English and three of the student's own choosing.

H. Students entering a Virginia high school for the first time after the first semester of their eleventh grade year must meet the requirements of subdivision G 1 c or G 2 c of this section. Students transferring after 20 instructional hours per course of their senior or twelfth grade year shall be given every opportunity to earn a Standard, Advanced Studies, or Modified Standard Diploma. If it is not possible for the student to meet the requirements for a diploma, arrangements should be made for the student's previous school to award the diploma. If these arrangements cannot be made, a waiver of the verified unit of credit requirements may be available to the student. The Department of Education may grant such waivers upon request by the local school board in accordance with guidelines prescribed by the Board of Education.

I. Any local school division receiving approval to increase its course credit requirements for a diploma may not deny either the Standard, Advanced Studies, or Modified Standard Diploma to any transfer student who has otherwise met the requirements contained in these standards if the transfer student can only meet the division's additional requirements by taking a heavier than normal course load in any semester, by taking summer school, or by taking courses after the time when he otherwise would have graduated.

J. The transcript of a student who graduates or transfers from a Virginia secondary school shall conform to the requirements of 8 VAC 20-160-10, Regulations Governing Secondary School Transcripts.

K. The accreditation status of a high school shall not be included on the student transcript provided to colleges, universities, or employers. The board expressly states that any student who has met the graduation requirements established in 8 VAC 20-131-50 and has received a Virginia diploma holds a diploma that should be recognized as equal to any other Virginia diploma of the same type, regardless of the accreditation status of the student's high school. It is the express policy of the board that no student shall be affected by the accreditation status of the student's school.

The following information is taken from the Lynchburg City Schools School Board Regulation 6-58.1:

1.   If a particular grade is weighted at the school from which a student transfers and this Division weights the grade for the same course, the transferred grade will be weighted.

2.   If a particular grade is weighted at the school from which a student transfers and this Division does not weight the grade for the same course, the transferred grade will not be weighted.

3.   If [particular courses are] noted as honors program courses and are weighted in this Division, the grades will be weighted even if the other division did not weight [them].

4.   If [particular courses are] not weighted [and are not] noted as honors courses elsewhere, the grades will not be weighted.

21

First-time Transfers to a Virginia Public School

NOTE: This information is relevant for students transferring into a Virginia public school <u>for the first time</u>.
Beginning = Within the first 20 hours of instruction and **During** = After the first 20 hours of instruction

During 9th Grade OR Beginning of 10th Grade:		**Standard Diploma** for 9th Graders in 2003-04 and beyond	**Advanced Studies Diploma** 9th Graders in 2000-01 and beyond
	English	2	2
	Mathematics	1	2
	Science	1	2
	History & Social Science	1	2
	Student Selected	1	1
	Must Earn	**6** Verified Credits	**9** Verified Credits:

During 10th Grade OR Beginning of 11th Grade:		**Standard Diploma** for 9th Graders in 2003-04 and beyond	**Advanced Studies Diploma** 9th Graders in 2000-01 and beyond
	English	1	2
	Mathematics	1	1
	Science	1	1
	History & Social Science	1	1
	Student Selected	0	1
	Must Earn	**4** Verified Credits	**6** Verified Credits:

During 11th Grade OR Beginning of 12th Grade:		**Standard Diploma** for 9th Graders in 2003-04 and beyond	**Advanced Studies Diploma** 9th Graders in 2000-01 and beyond
	English	1	1
	Student Selected	1	3
	Must Earn	**2** Verified Credits	**4** Verified Credits:

During 12th Grade:	Students should be given every opportunity to earn a diploma; if this is not possible, arrange to have the previous school award the diploma; or seek a waiver of the verified credit requirement from the VDOE.

22

COURSE OFFERINGS LISTED IN THE PROGRAM OF STUDIES
(DE=Dual Enrollment) Courses for the Modified Standard Diploma or Applied Studies Diploma are on page 56

Academic Support – pgs 54-55
7211 SOL Review – English
7212 SOL Review – Writing
7221 SOL Review – Math
7231 SOL Review – Science
7241 SOL Review – Soc. Stud.
7610 SAT Prep
1930 ELL Support
1192 Accelerating – Reading I
1130 Accelerating – Reading II
7222 Math Lab
STUDY A & B Study Hall
(These courses can be taken repeatedly for elective credit)

Architecture & Construction - pgs 41-42
6760 Drafting III
8431 Construction Technology
8240 Building Trades I
8250 Building Trades II

Art - pgs 51-52
5510 Art I
5520 Drawing
5530 Painting I
5540 Painting II
5550 Sculpture I
5551 Sculpture II
5560 Photography
5570 Digital Photography & Printmaking
5580 Commercial Art
5517 Adv. Studio Art
5519 AP Portfolio Art
5529 AP Art History

Arts, A/V Technology & Communications - pg 42
8561 Communication System
7450 Video & Media Technology

Business, Management, Administration & Finance-pgs 42-43
6160 Accounting I
6170 Accounting II
6140 Business Management
6150 Business Law
3740 Computer Applications
6340 Computer Information Systems
6260 Design, Multimedia & Web Technologies
6240 Keyboarding
6250 Keyboarding Applications
6370 Principles of Business & Marketing

Central Va. Governor's School - pg 60
3217 Research Course
3219 Physics
2317 Math Analysis/Pre-Calculus (DE)
3329 College Anatomy & Phys (DE)
3227 Senior Tech Seminar
3729 College Comp Science (DE)
2329 Calculus-Single Variable I & II (DE)
2228 Connections in Math

Computer Science - pgs 37-38
3750 Intro to Computer Science
3760 Computer Science II
3729 AP Computer Science

Drama - pgs 52-53
5610 Intro to Theatre
5611 Musical Theatre Dance
5620 Acting I
5630 Acting II
5621 History of Musical Theatre
5622 Playwriting
5623 Directing
5640 App Tech Theatre I
5641 Tech Theatre I Design
5360 Jazz Ensemble
5642 Tech Theatre I Production
5650 App Tech Theatre II
5651 Tech Theatre II
5652 Costuming

Economics - pg 25
6151 Personal Finance & Economics
4439A AP Microeconomics
4449B AP Macroeconomics

Education & Training - pgs 43
6541 Early Childhood Ed I
6542 Early Childhood Ed II
6550 Teachers for Tomorrow

English/Speech- pgs 25-27
1190 World Lit & Comp I
1297 Adv. World Lit & Comp
1100 World Lit & Comp II
1207 Adv. World Lit & Comp II
1110 American Lit & Comp
1217 Adv. American & World Lit & Comp
1319 AP Language & Comp
1120 English Lit & Comp
1227 Adv. English Lit & Comp
1328 Adv. College Comp (DE)

English/Speech- pgs 25-27
1329 AP Lit & Comp
5850 Public Speaking I
5860 Public Speaking II
1310 Creative Writing
1429 AP Seminar
1439 AP Research

Foreign Language - pgs 27-29
1590 French I
1500 French II
1510 French III
1527 Adv. French IV
1529 AP French V
1690 German I
1600 German II
1610 German III
1627 Adv. German IV
1629 AP German V
1790 Latin I
1700 Latin II
1710 Latin III
1737 Adv. Latin Literature
1729 AP Latin Vergi1890 Spanish I
1800 Spanish II
1810 Spanish III
1827 Adv. Spanish IV
1829 AP Spanish V

Health – pg 40
5240 Driver's Ed & Personal Health
5250 Health & Family Living

Health Sciences – pg 44
6840 Health & Medical Sciences Exploratory
6810 Dental Careers I
6820 Dental Careers II
8360 Nurse Aide I
8362 Nurse Aide II
5260 Athletic Training I
5261 Athletic Training II

Hospitality & Tourism - pg 44-45
6440 Intro to Hospitality, Tourism & Recreation
6441 Culinary Arts I
6442 Culinary Arts II
6443 Culinary Arts Specialization

Human Services - pg 45
8340 Cosmetology I
8350 Cosmetology II

23

Information Technology – pgs 45-46
8540 Computer Systems Tech I
8550 Computer Systems Tech II
8553 Cyber Security
7140 Information Tech Assistant I
7150 Information Tech Assistant II

Law, Public Safety, Corrections and Security – pg 46
8702 Criminal Justice I
8703 Criminal Justice II

Leadership - pg 54
7770 Leadership Training

Manufacturing - pg 46
8440 Manufacturing Systems
8450 Precision Machine Tech I
8460 Precision Machine Tech II/Intro to Machine Tools

Marketing Sales & Service-pg 47
6942 Sports, Entertainment, & Rec
6951 Marketing I
6960 Marketing II

Mathematics – pgs 34-36
2110 Alg, Functions & Data Analysis
2090 Algebra I, Part I
2100 Algebra I, Part II
2290 Algebra I
2387 Adv Algebra I
2200 Algebra II
2397 Adv Algebra II
2210 Geometry
2307 Adv Geometry w/Trig
2220 Trig/Functions
2317 Adv Math Analysis
2328 Adv Pre-Calc/Applied Calc
2429 Adv Placement Statistics
2329 Adv Placement Calculus
2339 Adv Placement Calculus
2397BP Adv Algebra II PETAL
2429 AP Statistics
2101 Algebra Functions & Data Analysis

Music – pgs 50-51
5340 Concert Band I
5350 Symphonic Band I

Music – pgs 50-51
5370 Wind Ensemble
5380 Percussion Ensemble
5460 Chorus I
5470 Chorus II - Concert Choir
5480 Chorus III
5410 Orchestra I
5420 Orchestra II
5430 Beginning Midi & Computer Applications in Music
5439 AP Music Theory

Newspaper & Yearbook - pg 54
7410 Newspaper
7420 Yearbook

Physical Education - pg 41
5140 Physical Ed Drill
5190 Physical Ed 9
5191 Physical Ed 10
5151 Weight Training I
5152 Weight Training II
5161 Fitness for Life
5931YS Foundations of Personal Fitness and Wellness

Positive Parenting Program- pg 54
5241 Family Health & Social Dev.
7480 Child Development & Care
7481 Nutrition & Food Preparation

Reserve Officer Training Corps (ROTC) - pgs 49-50
5710 MCJROTC Leadership Ed I
5720 MCJROTC Leadership Ed II
5730 MCJROTC Leadership Ed III
5740 MCJROTC Leadership Ed IV
5750 AFJROTC Leadership Ed I
5760 AFJROTC Leadership Ed II
5770 AFJROTC Leadership Ed III
5780 AFJROTC Leadership Ed IV

Science - pgs 36-37
3200 Biology I
3210 Biology II Anatomy & Phys.
3211 Biology II Ecology
3220 Chemistry
3290 Earth Science
3307 Adv. Chemistry
3357 Adv. Scientific Research

Science - pgs 36-37
3328 Adv. College Biology (DE)
3387 Adv. Earth Science (gr. 8)
3397 Adv. Biology I
3449 AP Biology
3459 AP Chemistry
3469 AP Physics I
3479 AP Physics II
3429 AP Environmental Science

Science, Technology, Engineering & Math – pgs 47-48
6740 Drafting I
6750 Drafting II
6760 Drafting III
6770 Adv. Robotic Work/Cell Tech
6640 Tech Foundations
6650 Tech Transfer

Social Studies – pgs 38-40
4690 World Geo
4290 World History & Geo I
4397 Adv. World History & Geo I
4200 World History & Geo II
4307 Adv. World History & Geo II
4469 AP World History
4210 American History
4317 Adv. American History
4419 AP American History
4220 US Govt
4327 Adv. US Govt
4429 AP American Govt Politics & Comparative Govt Politics
4409 AP European History
4740 African-American Studies
4459 AP Human Geography
4250 Introduction to Psychology
3439 AP Psychology

Student Intern Programs – pg 53
7110 Teacher/Office Intern
7130 Elem./Middle Student Intern
7131 General Student Intern

Transportation, Distribution & Logistics – pg 48
8141 Intro to Auto Service Tech
8140 Auto Service Tech I
8150 Auto Service Tech II

**Any prerequisite listed for a course in any content area may be waived pending principal's approval. Please contact your student's counselor for any questions regarding prerequisites for courses.

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ECONOMICS

PERSONAL FINANCE & ECONOMICS (6151Y), Grades 10-12, Full Credit Year Course *Prerequisite: None*

Students explore many facets of financial decision-making involved in daily life. Skills in money management, record keeping, and banking are enhanced through the study of basic concepts of economics, insurance, credit, and other related topics. ***Students need to take the W!SE Financial literacy exam to meet diploma requirements.***

PERSONAL FINANCE & ECONOMICS (E6151SY), Rising Grades 10-12, Full credit is offered as a summer online course. *Prerequisite: None*

Students explore many facets of financial decision-making involved in daily life. Skills in money management, record keeping, and banking are enhanced through the study of related topics. ***Students need to take the W!SE Financial literacy exam to meet diploma requirements.***

ADVANCED PLACEMENT (AP) MICROECONOMICS & MACROECONOMICS (4439Y), Grades 11-12, Full Credit Year Course

The first semester of this course (microeconomics) aims to provide a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. The second semester (macroeconomics) explores the principles of economics that apply to an economic system as a whole. Particular emphasis will be placed on the study of national income and price-level determination, economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. **All students are required to take both AP examinations in May.**

ENGLISH

WORLD LITERATURE & COMPOSITION I A & B (1190Y), Grade 9, Full Credit Year Course

These classes emphasize reading comprehension, vocabulary, study skills, oral communication, and composition skills, including grammar, usage, and mechanics, through the study of world literature. Students will read widely and think, speak, and write about what they have read. Emphasis is on enabling students to develop strategies for future academic success.

ENGLISH (continued)

ADVANCED WORLD LITERATURE & COMPOSITION I (1297Y), Grade 9, Full Credit Year Course

Designed for students in the advanced diploma program, these classes emphasize reading, thinking, oral communication, and composition skills, including grammar, usage, and mechanics, through the study of world literature. Students must read and write extensively and participate in in-depth literature study. Vocabulary development, study and test-taking skills, and organization skills necessary to meet the demands of the advanced program are integral parts of these classes.

WORLD LITERATURE & COMPOSITION II (1100Y), Grade 10, Full Credit Year Course

With world literature as the vehicle, these classes will follow an integrated approach to language arts, combining reading, grammar, and vocabulary study with an emphasis on writing. Experiences in the classes will reflect the needs of literate adults in the community and stress the processes for writing, speaking, and reading effectively and correctly. **Near the end of the school year, students will take the End-of-Course Standards of Learning test in writing.**

ADVANCED WORLD LITERATURE & COMPOSITION II (1207Y), Grade 10, Full Credit Year Course

First semester emphasizes writing instruction through a thematic approach to expository and creative composition genres. Through the study of models and extensive opportunities to write, students improve their writing styles and ability to write different types of compositions. Literature study is used as inspiration for many writing activities. During second semester while continuing to improve writing skills, students engage in an in-depth study of literary works organized in thematic units. Vocabulary development, grammar, usage, and mechanics are stressed in both semesters. **Near the end of the school year, students will take the End-of-Course Standards of Learning test in writing.**

AMERICAN LITERATURE & COMPOSITION (1110Y), Grade 11, Full Credit Year Course

These classes combine a study of the development of American literature with instruction in communication skills. Vocabulary study, oral reporting, and frequent writing assignments are based on representative selections from each literary period. Near the end of the school year, students will take the 11th grade Standards of Learning tests in literature and writing. **Near the end of the school year, students will take the End-of-Course Standards of Learning test in literature.**

ENGLISH (continued)

ADVANCED AMERICAN & WORLD LITERATURE & COMPOSITION (1217Y), Grade 11, Full Credit Year Course

During the first semester students analyze pieces of literature considered landmarks of American literature while in the second semester the emphasis shifts to landmarks in worl literature (e.g. Plato's *Republic,* Shakespeare's *King Lear,* and Hugo's *Les Miserables*).   In both semesters students do independent research, read and write extensively, and make oral reports on what they have read and researched. **Near the end of the school year, students will take the End-of-Course Standards of Learning test in literature.**

ADVANCED PLACEMENT (AP) LANGUAGE & COMPOSITION (1319Y), Grade 11, Full Credit Year Course

These classes prepare students to take the College Entrance Examination Board Advanced Placement Language and Composition Test. Emphases of the classes are rhetoric and the structure of language as they relate to effective composition. Students will also cover the 11th grade Virginia Standards of Learning in preparation for the required End-of-Course Standards of Learning tests in literature administered near the end of the school year. Students enrolling should be competent in composition and able to work independently on a variety of writing assignments and projects. **All students are required to take the AP examination in May.**

ENGLISH LITERATURE & COMPOSITION (1120Y), Grade 12, Full Credit Year Course

These classes combine a study of English literature, culture, and language development with instruction in communication skills. Instruction in writing a variety of multi-paragraph themes is provided along with the usual activities involving vocabulary study, sentence structure, paragraph development, oral reporting, and research.

ADVANCED ENGLISH LITERATURE & COMPOSITION (1227Y), Grade 12, Full Credit Year Course

These classes are an in-depth study of major authors in all literary periods of English literature. Instruction in formal organizational patterns in writing and advanced research skills is integral. Students must do independent research, parallel reading, and oral reporting as well as frequent writing assignments and a research paper. The emphasis during second semester is on error-free writing.

ADVANCED COLLEGE COMPOSITION (1328Y), Dual Enrollment English, Grades 11-12, Full Credit Year Course (5.0 GPA for A)

These classes offer students achieving a grade of C or better the opportunity to earn six hours of college credit through the dual enrollment program with Central Virginia Community College. A comprehensive survey of major authors in English

literature, these classes emphasize the development of writing skills and writing as process, including instruction in formal organizational patterns and style. Students work toward error-free writing and receive instruction in advanced research skills. **If taken in grade 11, near the end of the school year, students will take the End-of-Course Standards of Learning test in literature. Students who have completed the course with a grade of C or better receive 6 semester hours of credit from CVCC for English 111 and 112. Students must qualify for enrollment for this course by taking the CVCC placement test or by ACT or SAT qualifying scores. Because this course is a dual enrollment course, certain fees may apply. (See page 57 for details)**

ADVANCED PLACEMENT (AP) LITERATURE & COMPOSITION (1329Y), Grade 12, Full Credit Year Course

These classes prepare students to take the College Entrance Examination Board Advanced Placement Literature and Composition Test. Emphases are the analytic reading of fiction and poetry and the writing of critical essays. Students enrolling should be competent in composition, experienced in literary interpretation, and able to think abstractly. Students must also be able to work independently on a variety of reading and writing projects. **All students are required to take the advanced placement examination in May.**

CREATIVE WRITING (1310Y), Grades 9-12, Full Credit Year Course

This course will expose students to many aspects of the writing process, including generating ideas, writing and revising drafts, and editing. Students will write extensively and participate in helpful critiques of their own work and that of their peers.   This course will be designed to allow teachers to work individually with students during conferences. Through frequent writing exercises, students will study voice, imagery, characterization, dialogue, and narration. Students will work in free verse poetry, prose poetry, fiction, and creative nonfiction.

ENGLISH (continued)

ADVANCED PLACEMENT (AP) SEMINAR (1429Y), Grades 11-12, Full Credit Year Course

 AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and

visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

There are no prerequisites for the AP Seminar course. The course culminates in an Individual research-based essay of approximately 2,000 words and a presentation, performance, or exhibition with an oral defense; where the student answers 3-4 questions from a panel of trained evaluators and an end-of-course exam (3 hours).

ADVANCED PLACEMENT (AP) RESEARCH (1439Y), Grades 11-12, Full Credit Year Course
Prerequisite: AP Seminar

The second course in the AP Capstone program, AP Seminar is prerequisite for AP Research. If you earn scores of 3 or higher in both AP Seminar and AP Research as well as on four additional AP Exams of your choosing, you will receive the AP Capstone Diploma. This signifies outstanding academic achievement and attainment of core academic and research skills. Alternatively, if you earn scores of 3 or higher on the AP Seminar and AP Research Exams only, you will receive the AP Seminar and Research Certificate signifying your attainment of college-level academic and research skills.   AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest.   Through this exploration, students design, plan, and conduct a yearlong mentored, research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methods; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. The course culminates in an academic thesis paper of approximately 5,000 words and a presentation, performance, or exhibition with an oral defense.

SPEECH

PUBLIC SPEAKING I (5850A, 5850B), Grades 9-12, 1st or 2nd Sem., One-half Credit.

Content includes instruction and practice in clarity of oral expression, logical reasoning, and proper organization of material. The student will learn to prepare speeches to inform, convince, persuade, demonstrate and entertain.

PUBLIC SPEAKING II (5860A, 5860B), Grades 9-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Public Speaking I*

In Public Speaking II, students will refine oral interpretation skills, expand persuasive speaking skills, perform impromptu speeches, deliver special occasion speeches, and develop expertise in at least one major speech category.

FOREIGN LANGUAGE

The secondary schools offer a sequential program in French, Spanish, German, and Latin. First-year study for high school credit is available to 8th grade students in French, Spanish, and Latin at all three middle schools.

Each language in the foreign language offerings is designed for any student who has demonstrated a reasonable proficiency in his or her native language and wishes to develop facility in another language.   To obtain full benefit of the language program, students are encouraged to begin study in the 8th or 9th grade. College-bound students are advised to investigate the specific foreign language requirements of colleges in which they have interest. All students should work closely with their counselors in planning their foreign language programs.

FRENCH I (1590Y), Grades 8-12, Full Credit Year Course
Prerequisite: None

Communicating in French is the highlight of these beginning semesters of language study. Students become involved immediately in using the language to simulate daily life situations. Activities include speaking, listening, writing, reading, and learning about French culture. Correlated audio-visuals serve as stimuli to involve students in conversations of interest to teenagers.

FRENCH II (1500Y), Grades 9-12, Full Credit Year Course
Prerequisite: French I

Emphasis on the four basic skills of speaking, listening, reading, and writing is continued during second year study. Oral discussions in French based on themes of contemporary interest provide the basis for student involvement. Study of the geography and culture of French-speaking countries is an integral part of the language study. Students' use of concepts and vocabulary is cumulative.

FOREIGN LANGUAGE
(continued)

FRENCH III (1510Y), Grades 10-12, Full Credit Year Course
Prerequisite: French II

This course builds on the vocabulary and grammar bases acquired in levels I and II. Audio-lingual experiences continue to help students develop both aural and oral competency as they listen to more extensive passages and participate in more complex speaking exercises. The focus on reading and writing also increases at this level as students read excerpts from current literature and read and write about the culture of francophone countries.

ADVANCED FRENCH IV (1527Y), Grade 11 or 12, Full Credit Year Course *Prerequisite: French III*

This course focuses on the use of all concepts and vocabulary from previous study in addition to new vocabulary and idioms. Culture-based readings from periodicals and selections from literature are the basis for refining composition and reading skills and provide the topics for conversation. Experience in listening to extended passages develops students' comprehension skills and provides practice in using higher level thinking skills.

ADVANCED PLACEMENT (AP) FRENCH V (1529Y), Grade 12, Full Credit Year Course *Prerequisite: French IV (May be waived by recommendation of instructor.)*

This Advanced Placement Language course is equivalent in content and skills developed to the third year college level. Students engage in intensive drills of extemporaneous speaking, grammar review, analyses of reading material and listening to many types of selections to develop a high level of listening comprehension. **All students are required to take the advanced placement examination in May.**

GERMAN I (1690Y), Grades 9-12, Grade 8, Paul Laurence Dunbar Middle School for Innovation Only
Full Credit Year Course *Prerequisite: None*

In this introductory course, students become involved with the German language through conversations and readings relating to everyday chores, school, family, leisure-time activities, foods, weather, travel, parties, and shopping. During the second semester, students read longer narratives in the target language about important cities, states, German-speaking regions, and holidays. Authentic audio-visual aids reinforce aural-oral skills while lending authentic cultural insights.

GERMAN II (1600Y), Grades 9-12, Full Credit Year Course
Prerequisite: German I

German II students continue to build facility with the language through conversations and reading/writing activities. Topics first semester include vacations, school, health, home, employment, and clothing. During second semester, students discuss leisure time activities, cars, famous Germans, and selected German-speaking cities.

FOREIGN LANGUAGE
(continued)

GERMAN III (1610Y), Grades 10-12, Full Credit Year Course
Prerequisite: German II

The refinement of oral and written communication skills through conversational practice and the reading of selections by modern German authors constitute the major portion of third-year study. Students read and discuss German children's literature, poetry, current events from newspaper and magazine articles, and short stories. During discussions, students learn about levels of language and the appropriateness of each in various situations.

ADVANCED GERMAN IV (1627Y), Grades 11 & 12, Full Credit Year Course *Prerequisite: German III*

At this level of language study, students are expected to have achieved facility in the German language, which is now used in instruction, conversation, reading, and discussion. Students continue to discuss German literature and everyday topics of conversation. In addition, frequent writing assignments enhance skills in grammar and serve to increase vocabulary.

ADVANCED PLACEMENT (AP) GERMAN V (1629Y), Grade 12, Full Credit Year Course *Prerequisite: German IV (may be waived by recommendation of instructor)*

This Advanced Placement Language course is equivalent in content and skills developed to the third year college level. Students engage in intensive drills of extemporaneous speaking, grammar review, analyses of reading material and listening to many types of selections to develop a high level of listening comprehension. **All students are required to take the advanced placement examination in May.**

LATIN I (1790Y), Grades 8-12, Full Credit Year Course
Prerequisite: None

The first-year Latin course provides the foundation for understanding Latin and the basis for learning any foreign language. Students enlarge their vocabulary, refine grammar in English, and learn about the origins of many of our traditions and institutions while reading the history, myths, and legends of the ancient Romans.

LATIN II (1700Y), Grades 9-12, Full Credit Year Course
Prerequisite: Latin I

Latin II begins with a thorough grammar review based on readings from Roman history and continues to develop the vocabulary and reading comprehension necessary to read Latin. During the second semester, readings from Julius Caesar and other celebrated authors help students learn more about their own traditions and develop reading skills and concepts applicable to Latin or any other language.

FOREIGN LANGUAGE
(continued)

LATIN III (1710Y), Grades 10-12, Full Credit Year Course
Prerequisite: Latin II

Latin III is a general introduction to the politics and government of Rome. During first semester, students study the political, environmental, and economic problems of Rome in the 1st century BC through readings from Sallust and Cicero, among others. In second semester, students read selections from Ovid, Seneca, Catullus, Tacitus, Pliny, and other writers as they explore Latin literature from the 1st century AD through the Middle Ages.

ADVANCED LATIN LITERATURE (1737Y), Grades 11 or 12, Full Credit Year Course *Prerequisite: Latin III*

Students will read and study a variety of prose and poetry selections from a wide range of Latin authors, excluding Vergil. Catullus, Ovid, Cicero, and Horace will be the subjects of study along with other writers of their eras. Advanced Latin Literature with its inclusion of both prose and poetry and its breadth of authors offers the student a broader preparation for college study and a deeper understanding of classical literature than Advanced Placement Latin Vergil alone. Taught alternate years with Advanced Placement Latin Vergil A & B.

ADVANCED PLACEMENT (AP) LATIN VERGIL (1729Y), Grades 11 or 12, Full Credit Year Course *Prerequisite: Latin III*

Students will read selected books and individual passages from Vergil's *Aeneid* to learn about the epic tradition, the legend of the founding of Rome, and the basic precepts of literature. In addition, students will study parallel themes in Classical and English literature. **All students are required to take the advanced placement examination in May.** Taught alternate years with Advanced Latin Literature.

SPANISH I (1890Y), Grades 8-12, Full Credit Year Course
Prerequisite: None

This introductory course is an initiation into language as a means of active communication for which a reasonable proficiency in understanding, speaking, reading, and writing Spanish is the overall goal. Frequent conversational activities, projects, and dramatizations involve students actively in the language.

SPANISH II (1800Y), Grades 9-12, Full Credit Year Course
Prerequisite: Spanish I

All fundamental structures of the beginning course are reinforced during second-year study with an increased emphasis on the development of oral skills in active conversation. However, this course expands to encompass more comprehensive materials and structures so that by the end of the two-year sequence, students should be able to use effectively the four linguistic tools.

FOREIGN LANGUAGE
(continued)

SPANISH III (1810Y), Grades 10-12, Full Credit Year Course
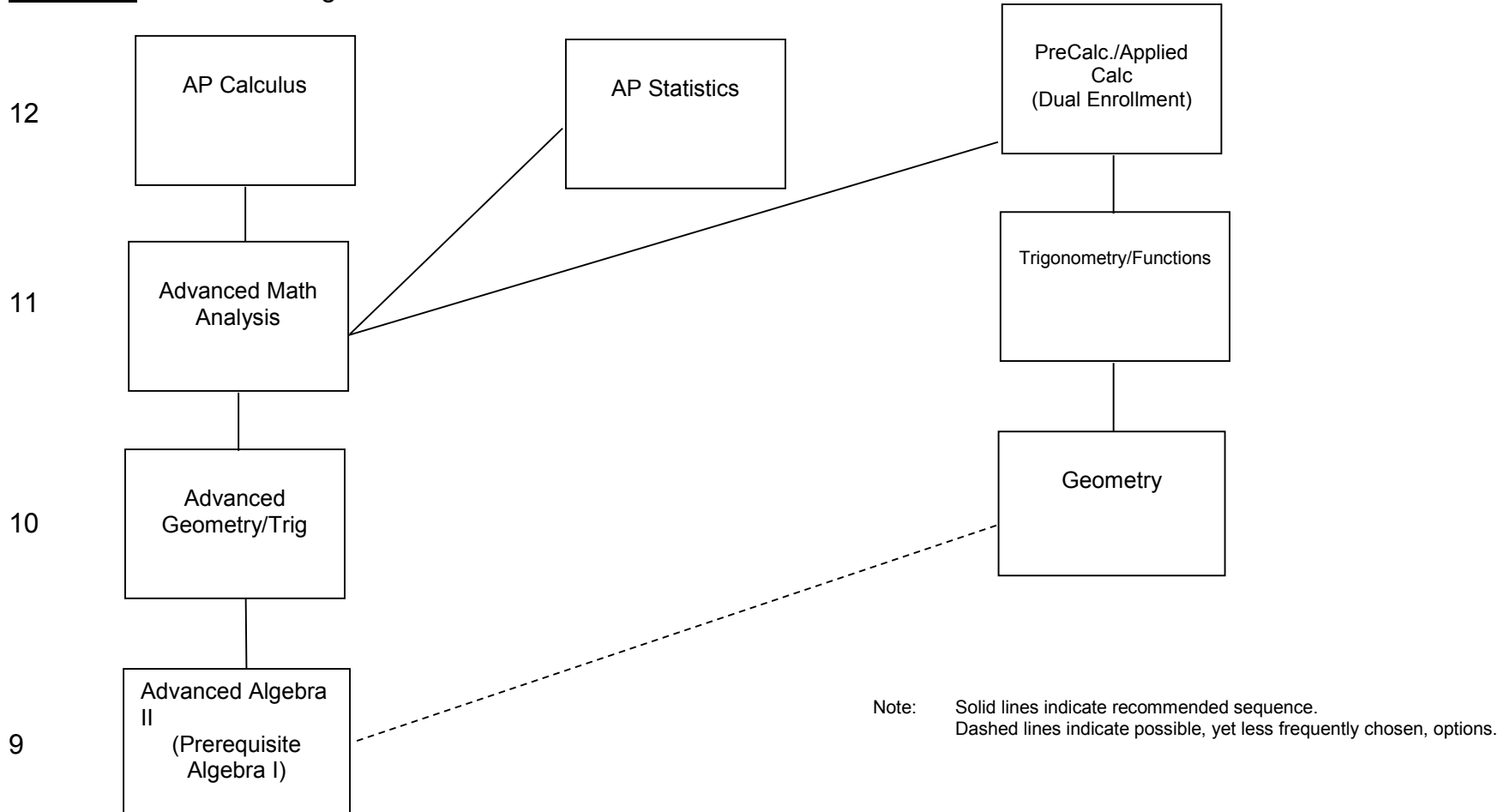*Prerequisite: Spanish II*

At this level, the Spanish language is used in the classroom for conversational and instructional purposes. Emphasis is placed on increasing the scope of vocabulary, verb tenses, and grammatical structures relating to thematic units. During second semester topics of spontaneous interest and comparative cultures are increasingly emphasized.

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Mathematics Instructional Sequence Options

OPTION 1 – Advanced Algebra II in 9th Grade

Grade			
12	AP Calculus	AP Statistics	PreCalc./Applied Calc (Dual Enrollment)
11	Advanced Math Analysis		Trigonometry/Functions
10	Advanced Geometry/Trig		Geometry
9	Advanced Algebra II (Prerequisite Algebra I)		

Note: Solid lines indicate recommended sequence.
            Dashed lines indicate possible, yet less frequently chosen, options.

Classes at the Central Virginia Governor's School (CVGS), Early College Program (ECP), and STEM Academy are available for students who meet the eligibility requirements and have been selected for the program. Please refer to the section on the Program of Studies for additional information.

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Mathematics Instructional Sequence Options

OPTION 2 – PETAL – Algebra I/Advanced Algebra II in 9th Grade
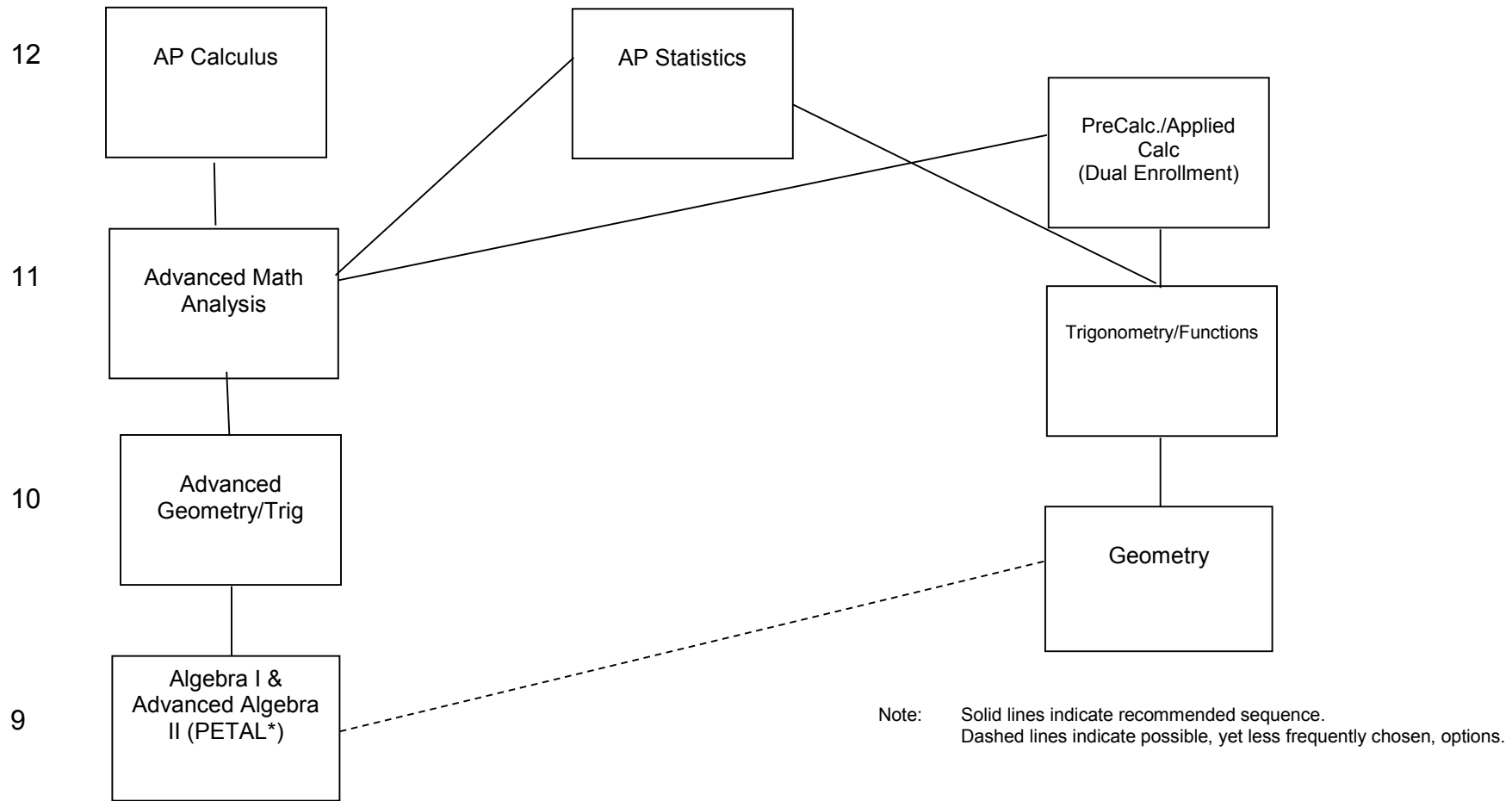
12	AP Calculus
	AP Statistics
	PreCalc./Applied Calc (Dual Enrollment)
11	Advanced Math Analysis
	Trigonometry/Functions
10	Advanced Geometry/Trig
	Geometry
9	Algebra I & Advanced Algebra II (PETAL*)

Note: Solid lines indicate recommended sequence.
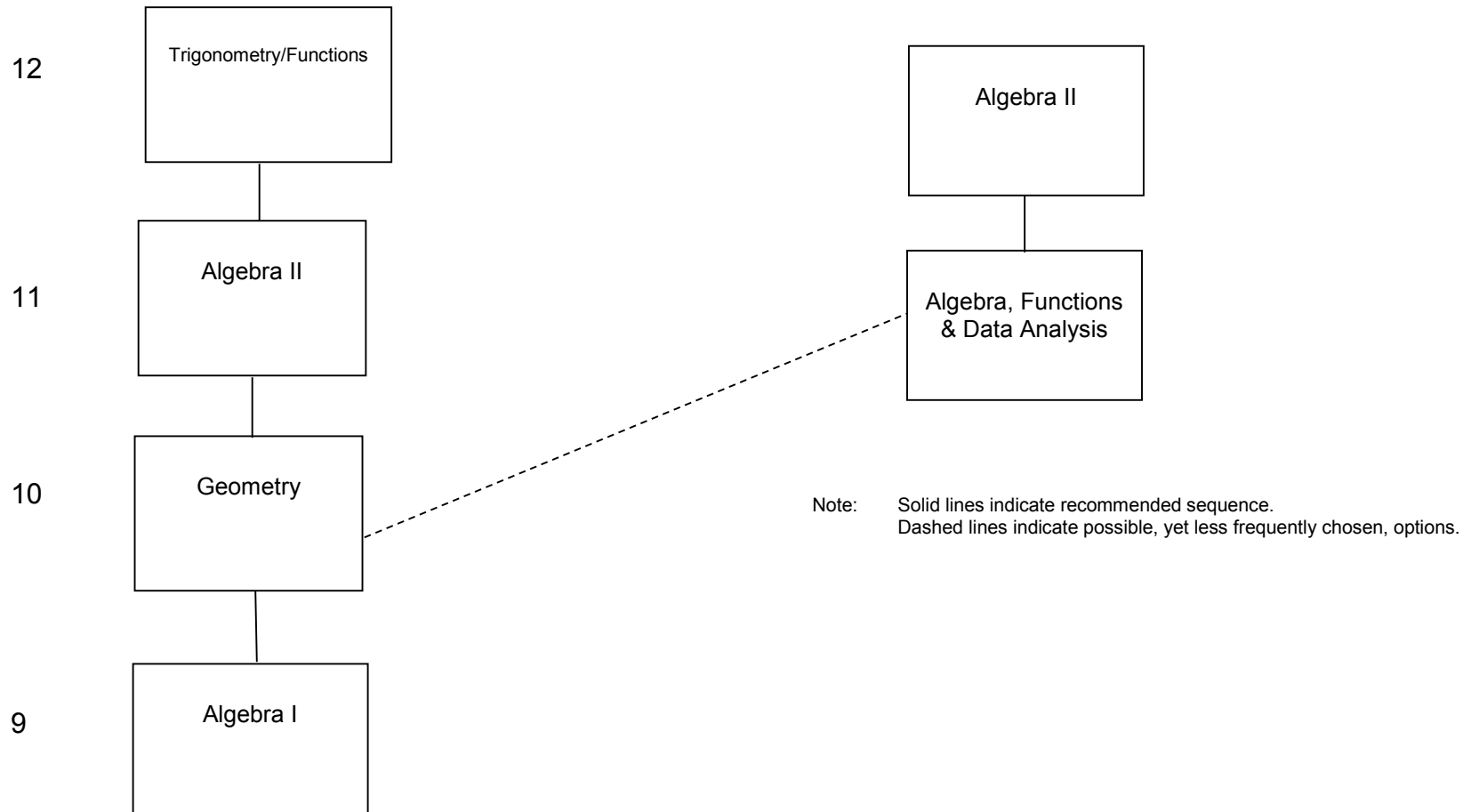Dashed lines indicate possible, yet less frequently chosen, options.

Classes at the Central Virginia Governor's School (CVGS), Early College Program (ECP), and STEM Academy are available for students who meet the eligibility requirements and have been selected for the program. Please refer to the section on the Program of Studies for more information.

*PETAL – Admission to PETAL requires meeting selection criteria. See your counselor for additional information.
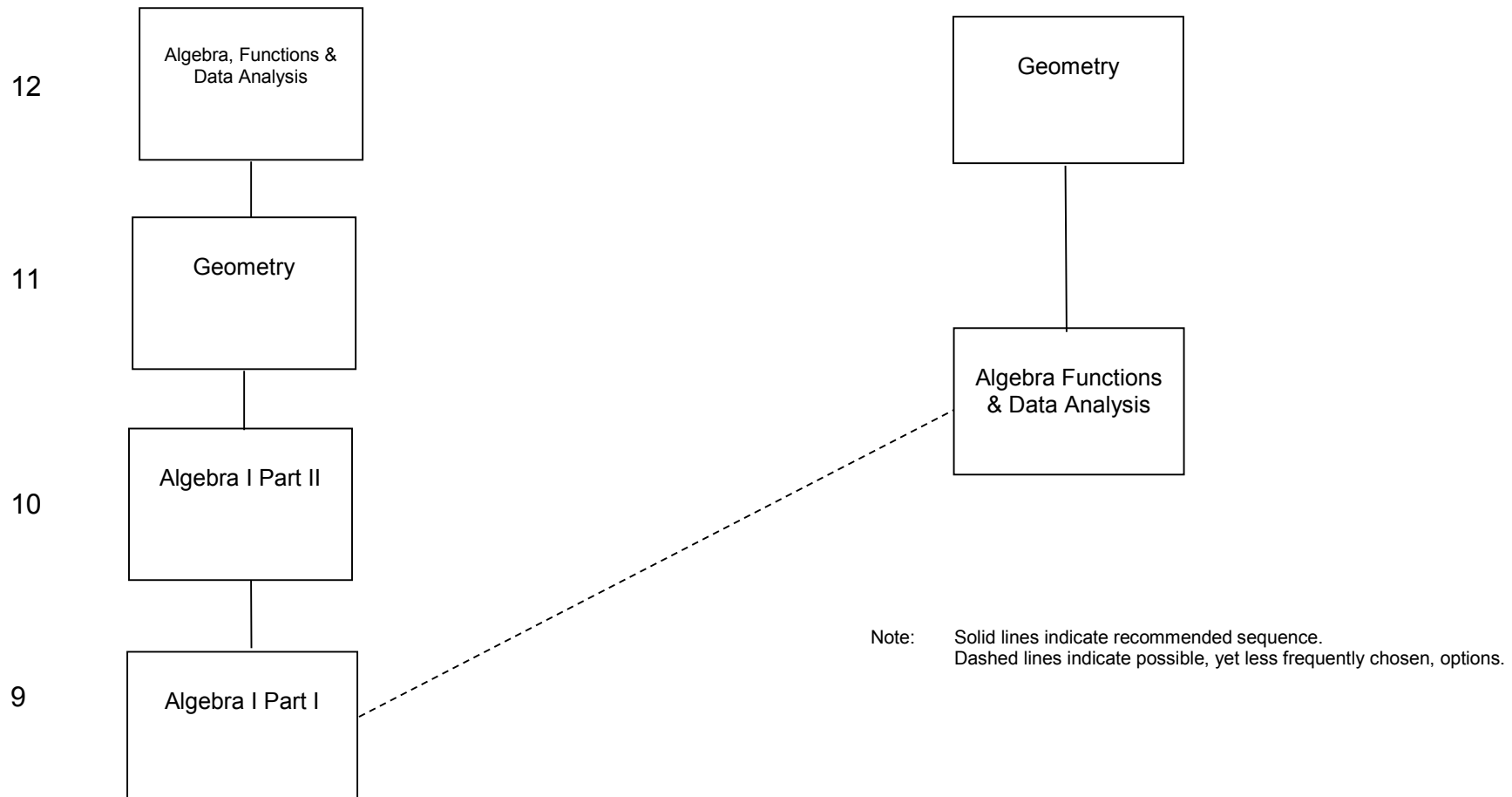
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Mathematics Instructional Sequence Options

OPTION 3 – Algebra I in the 9th Grade

12	Trigonometry/Functions		Algebra II
11	Algebra II		Algebra, Functions & Data Analysis
10	Geometry		
9	Algebra I		

Note: Solid lines indicate recommended sequence.
Dashed lines indicate possible, yet less frequently chosen, options.

Classes at the Central Virginia Governor's School (CVGS), Early College Program (ECP), and STEM Academy are available for students who meet the eligibility requirements and have been selected for the program. Please refer to the section on the Program of Studies for more information.

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Mathematics Instructional Sequence Options

OPTION 4 – Algebra I Part I in the 9th Grade

12	Algebra, Functions & Data Analysis	Geometry
11	Geometry	
10	Algebra I Part II	Algebra Functions & Data Analysis
9	Algebra I Part I	

Note: Solid lines indicate recommended sequence.
Dashed lines indicate possible, yet less frequently chosen, options.

Classes at the Central Virginia Governor's School (CVGS), Early College Program (ECP), and STEM Academy are available for students who meet the eligibility requirements and have been selected for the program. Please refer to the section on the Program of Studies for more information.

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MATHEMATICS

ALGEBRA, FUNCTIONS, AND DATA ANALYSIS (2110Y), Grades 10-12, Full Credit Year Course *Prerequisite: Algebra I or Algebra I, Part II*

Students in this one year course will study functions and their behaviors, systems of inequalities, probability, data analysis and statistics, and simple experimental design. More specifically, the behavior of common function families and the connections between data tables and graphs will be used to interpret data, draw conclusions, and make predictions. In addition, students will learn to calculate basic probabilities in a real-world context and to analyze data in a normal distribution. Topics in the course will be presented with data generated from practical applications. During second semester students will design a simple survey or experiment and then collect, analyze, and present their data and conclusions.

ALGEBRA I, PART I (2090Y), Grade 9, Full Credit Year Course

Algebra I, Part I is the first course of a two-course algebra sequence covering the Algebra I curriculum. In this two-part course, students have additional time to develop algebraic skills needed for higher mathematics. Students will be involved in learning activities that help make connections among algebra, arithmetic, geometry, statistics, and probability. This course includes instruction in properties and basic operations of natural numbers, their algebraic and graphical representation, and linear equations.   The 2nd semester includes the study of inequalities and systems of linear equations and inequalities. Hands-on activities, graphing calculators, and computer technology will be used extensively. Algebra I Part I is the prerequisite to Algebra I Part II. Algebra Part I and Algebra I Part II must be completed to receive full credit.*

ALGEBRA I, PART II (2100Y), Grade 10, Full Credit Year Course *Prerequisite: Algebra I, Part I*

Algebra I, Part II is the second course of a two-course algebra sequence covering the Algebra I curriculum. In this two-part course, students have additional time to develop algebraic skills needed for higher mathematics. Students will be involved in learning activities that help make connections among algebra, arithmetic, geometry, statistics, and probability. Number patterns, functions, applying equations, probability, statistics and interpreting data will be covered.   Hands-on activities, graphing, calculators, and computer technology will be used extensively. Algebra I Part I is the prerequisite to Algebra I, Part II. Algebra I, Part I and Algebra I, Part II must be completed to receive full credit. **Near the end of the school year, students will take the Algebra I Standards of Learning test.**

ALGEBRA I (2290Y), Grades 8 or 9, Full Credit Year Course *Prerequisite: Pre-Algebra and teacher recommendation or Foundations in Algebra.*

This one year algebra program includes instruction in properties and basic operations of rational numbers, their algebraic and graphical representation, linear equations, inequalities and systems of linear equations and inequalities. The second semester includes the study of

MATHEMATICS (continued)

polynomials, radical equations, quadratic equations with real solutions, and the concept of functions. **Near the end of the school year, students will take the Algebra I Standards of Learning test.**

ADVANCED ALGEBRA I (2387Y), Grade 8, Full Credit Year Course *Prerequisite: Pre-Algebra and teacher recommendation.*

This advanced one year algebra program is only available in the 8th grade. It includes instruction in greater depth than the traditional algebra course. Students will attach meaning to the abstract concepts of algebra by using tables and graphs to interpret equations and inequalities and to analyze functions. Matrices will be used to organize and manipulate data. Calculators, computers, spreadsheets, and graphing calculators or computer graphing simulators will be used to solve problems. **Near the end of the school year, students will take the Algebra I Standards of Learning test.**

ALGEBRA II (2200Y), Grades 9-11, Full Credit Year Course *Prerequisite: Algebra I or Algebra I, Part II and teacher recommendation.*

This course includes the study of real numbers and matrices, equations including rational and radical expressions, relations and systems and how they are used in mathematical modeling. The second semester of Algebra 2 will include the study of complex numbers, polynomials and rational functions, an introduction to statistics and probability, as well as connections with geometry, physics, chemistry, business, and consumer problems. **Near the end of the school year, students will take the Algebra II Standards of Learning test.**

ADVANCED ALGEBRA II (2397Y), Grade 9, Full Credit Year Course *Prerequisite: Advanced Algebra I*

The first semester includes the study of equations, inequalities, relations, functions, systems of equations, matrices, polynomials, irrational numbers, complex numbers, and conic sections. The second semester of this course includes the study of higher degree polynomials, rational and exponential functions, and statistics and probability. **Near the end of the school year, students will take the Algebra II Standards of Learning test.**

GEOMETRY (2210Y), Grades 10-12, Full Credit Year Course *Prerequisite: Algebra I*

This plane geometry course includes the study of perpendicular and parallel lines, angles and their relationships, congruent triangles and parallelograms and other polygonal regions. Also included are similar figures, the Pythagorean Theorem, circles, their tangents and secants, and three-dimensional geometry and transformational geometry. **Near the end of the school year, students will take the Geometry Standards of Learning test.**

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MATHEMATICS (continued)

ALGEBRA I; ADVANCED ALGEBRA II (2290Y), Grade 9, Full Credit Year Course *Prerequisite: Teacher recommendation and Foundations in Algebra or Pre-Algebra*

This is a two-year math program taught in one year during a two-period block. Algebra is taught first semester. Instruction includes the properties and basic operations of natural numbers, their algebraic and graphical representation, and linear equations. Also included is the study of inequalities and systems of linear equations and inequalities. Advanced Algebra 2 is taught during the second semester. This course includes the study of equations, inequalities, relations, functions, systems of equations, matrices, polynomials, irrational numbers, complex numbers, and conic sections. The course also includes the study of higher degree polynomial functions, rational functions, exponential and logarithmic functions, statistics and probability. **Near the end of second semester students will take the Algebra II Standards of Learning test.**

ADVANCED GEOMETRY WITH TRIGONOMETRY (2307Y), Grade 10, Full Credit Year Course *Prerequisite: Advanced Algebra II*

The first semester of this course includes the study of polynomial regions and their areas with special emphasis on right triangles. It also includes the concepts of similarity, volume, coordinate and transformational geometry and construction of plane figures. The second semester includes the study of the basic trigonometric functions, the inverse trigonometric functions, trigonometric identities, analytic trigonometry, solving triangles, analytic geometry, and the trigonometry of complex numbers. Graphing calculators will supplement the classroom portion of the course. **Near the end of the school year, students will take the Geometry Standards of Learning test.**

TRIGONOMETRY/FUNCTIONS (2220Y), Grades 11 or 12, Full Credit Year Course *Prerequisite: Algebra II and Geometry*

This course includes the study of trigonometric functions, their inverses and their graphs, solving triangles, trigonometric identities, trigonometric equations, and mathematical modeling using trigonometric functions with applications. Also included is the study of matrices, sequences and series, probability and statistics, as well as an introduction to pre-calculus.

ADVANCED MATH ANALYSIS (2317Y), Grades 11 or 12, Full Credit Year Course *Prerequisite: Trigonometry*

This course includes the study of relations, functions, equations, inequalities, polynomial and rational functions, and a review and extension of trigonometry. Also included are vectors and parametric equations, polar coordinates and complex numbers, conic sections, exponential and logarithmic functions, sequences and series, probability and statistics. Optional topics include iteration, fractals and discrete mathematics graph theory. Graphing calculator techniques are stressed.

MATHEMATICS (continued)

ADVANCED PRE-CALCULUS & APPLIED CALCULUS (2328Y), Grades 11-12, Dual Enrollment Math, Full Credit Year Course (5.0 GPA for A) *Pre-requisite: Trigonometry/ Functions or Math Analysis*

This course is a study of college algebra, matrices, and algebraic, exponential, and logarithmic functions. The course also presents the trigonometric functions, essentials of analytic geometry, and the concepts of sequences and series necessary for the study of calculus. The second semester presents limits, continuity, differentiation of algebraic and transcendental functions with applications, and an introduction to integration. **Students who have completed the course with a grade of C or better receive 6 semester hours of credit from CVCC for Math 163 and 271. Students must qualify for enrollment for this course by taking the CVCC placement test or by ACT or SAT qualifying scores. Because this course is a dual enrollment course, certain fees may apply. (see page 2 for details)**

ADVANCED PLACEMENT (AP) STATISTICS (2429Y), Grade 12, Full Credit Year Course *Prerequisite: Trigonometry/ Functions or Math Analysis*

Advanced Placement statistics includes exploratory analysis of data using graphical and numerical techniques to study patterns and departures from patterns. Students will plan a study that will include identifying important variables related to the conjecture and ways to measure the variables. Students will also anticipate patterns using probability and simulation and work with concepts of statistical inference such as: confidence intervals, tests of significance, and special case of normally distributed data. **All students are required to take the AP Statistics examination in May.**

ADVANCED PLACEMENT (AP) CALCULUS (2329Y), Grade 12, Full Credit Year Course *Prerequisite: Math Analysis*

This rigorous treatment of calculus will include the study of limits, continuity, derivatives, applications of the derivative and integrals. The course will emphasize integration techniques and the calculus of transcendental functions. Extensive graphing calculator techniques will be taught. **All students are required to take the AP Calculus AB examination in May.** Other calculus topics, including more integration techniques, arc length and surface area as well as the calculus of parametric equations, will be taught after the Advanced Placement exam. **Note: With sufficient student and faculty interest, AP Calculus BC can be offered (2339Y). The course will be graded and weighted at 5.0.**

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MATHEMATICS (continued)

ADVANCED PLACEMENT (AP) CALCULUS (2339Y), Grade 12, Full Credit Year Course *Prerequisite: Math Analysis*
    This is a double-period course. During the first semester students learn the AP Calculus AB content and that content is expanded upon and extended during the second semester. **Counts as two courses for purposes of GPA calculation. All students are required to take the AP Calculus BC examination in May.**

*The Board of Education's Guidelines on Credit Accommodations allow students with disabilities who are eligible for credit accommodations in mathematics to use each part of Algebra I, Parts I and II to earn a standard credit towards the three mathematics credits required for the Standard Diploma only. Two-part courses may also be combined with full-year courses in other Board-approved mathematics courses to meet the requirements for students with disabilities.

SCIENCE

EARTH SCIENCE (3290Y), Grades 9-12, Full Credit Year Course *Prerequisite: None*
    This laboratory science course teaches foundation skills needed for the study and understanding of all sciences. Topics include maps and landforms, meteorology, geology, oceanography, environmental studies, and astronomy. Also included is the study of the earth's composition, weathering, deposition, earthquakes, volcanoes, plate tectonics, and geologic time. **Near the end of the school year, students will take the earth science Standards of Learning test.**

ADVANCED EARTH SCIENCE (3387Y), Grade 8, Full Credit Year Course *Prerequisite: None*
    This advanced earth science course is available only in the 8th grade. Additional topics and supplemental activities supporting the earth science SOL are included in the course. **Near the end of the school year, students will take the Earth Science Standards of Learning test.**

BIOLOGY I (3200Y), Grades 9-12, Full Credit Year Course Credit *Prerequisite: None-It is preferable that students have completed Earth Science*
    This course includes the study of scientific processes and problem solving, ecology, biochemistry, and cytology (structure, function and reproduction of cells). Also included are human endocrinology, reproduction, genetics, evolution, behavior and taxonomy (classification). **Near the end of the school year, students will take the Biology Standards of Learning test.**

ADVANCED BIOLOGY I (3397Y), Grades 9 & 10, Full Credit Year Course *Prerequisite: It is preferable that students have completed Earth Science*
    The course content closely parallels that described in Biology A and B. A more quantitative approach may be utilized in dealing with specific problem areas, with additional emphasis placed on the underlying chemical principles for the biological sciences. Students will have an opportunity to conduct original research. **Near the end of the school year, students will take the Biology Standards of Learning test.**

SCIENCE (continued)

BIOLOGY II ANATOMY AND PHYSIOLOGY (3210Y), Grades 10-12, Full Credit Year Course *Prerequisite: Biology I*
    This year-long course follows Biology I and is a study of human anatomy and physiology.

BIOLOGY II ECOLOGY (3211Y), Grades 10-12, Full Credit Year Course *Prerequisite: Biology I*
    This year-long course follows Biology I and is a study of the environment and man's impact on it.

CHEMISTRY (3220Y), Grades 10-12, Full Credit Year Course *Prerequisite: Biology, Algebra I and Algebra II completed, currently taking Algebra II, or with principal permission*
    This course provides an introduction to basic chemical principles and their application. Topics include atomic structure, the periodic table, bonding, chemical equations and reactions, stoichiometry, states of matter, and thermochemistry. A solid knowledge of algebra is necessary for the calculations in this class. **Near the end of the school year, students will take the Chemistry Standards of Learning test.**

ADVANCED CHEMISTRY (3307Y), Grades 10-12, Full Credit Year Course *Prerequisite: Biology, Algebra I and Algebra II completed, currently taking Algebra II, or with principal permission*
The course content is closely aligned with that of general Chemistry. However, a more rigorous quantitative approach requires students to investigate, analyze, and summarize chemical reactions, molecular behaviors, and uses of substances. Hands-on experiments with high level math and thinking skills are included. Students will have an opportunity to conduct original research. **Near the end of the school year, students will take the Chemistry Standards of Learning test.**

ADVANCED PLACEMENT (AP) CHEMISTRY (3459Y), Grades 11 or 12, Full Credit Year Course *Prerequisite: Biology; Chemistry*
    This course is the equivalent of a first-year college general chemistry course. Topics include the structure of matter, kinetic theory of gases, chemical equilibria, chemical kinetics and the basic concepts of thermodynamics. Students will spend considerable time in individual study and in laboratory work. **All students are required to take the AP Chemistry examination in May.**

ADVANCED PLACEMENT (AP) PHYSICS I (3469Y), Grades 11 or 12, Full Credit Year Course *Prerequisite: Geometry*
    AP Physics I is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Students should have completed Geometry and may be concurrently taking Algebra II, or equivalent course. **All students are required to take the AP Physics I examination in May.**

SCIENCE (continued)

ADVANCED PLACEMENT (AP) PHYSICS II (3479Y), Grade 12, Full Credit Year Course
Prerequisite: AP Physics I and Math Analysis
The AP Physics II course is an algebra-based, introductory college-level physics course.   Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics.   Students should have taken or be concurrently taking Math Analysis or Pre-Calculus. **All students are required to take the AP Physics II examination in May.**

ADVANCED COLLEGE BIOLOGY (3328Y), Dual Enrollment, Grade 12, Full Credit Year Course (5.0 GPA for A) *Prerequisites: Biology, Chemistry; Geometry*
This college level course deals with the fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. Topics addressed include the organization and biochemical functions of cells, genetics, animal and plant physiology, continuity of life and ecological relationships. Appropriate applications of technology will allow for in-depth exploration of selected topics and opportunities for independent student research.   Students will be expected to attend, in addition to the five class periods a week, two additional periods to meet the required lecture and laboratory time to receive college credit. **Students who have completed the course with a grade of C or better receive 8 semester hours of credit from CVCC for Biology 101 and 102. Students must qualify for enrollment for this course by taking the CVCC placement test or by ACT or SAT qualifying scores. Because this course is a dual enrollment course, certain fees may apply. (see page 2 for details)** *Maximum number of students per class 23.*

ADVANCED PLACEMENT (AP) BIOLOGY (3449Y), Grades 11 or 12, Full Credit Year Course *Prerequisites: Biology, Chemistry; Geometry*
This course includes the study of the structure and biochemical functions of cells and cellular components, animal and plant physiology, principles of genetics, and the interdependence of organisms in ecosystems. Students will spend considerable time in unsupervised individual study and in laboratory work. **All students are required to take the AP Biology examination in May.**

SCIENCE (continued)

ADVANCED PLACEMENT (AP) ENVIRONMENTAL SCIENCE (3429Y), Grades 10-12, Full Credit Year Course
Prerequisite: Algebra I, Biology, Chemistry (corequisite)
The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry and geography.   **All students are required to take the AP Environmental Science examination in May.**

ADVANCED SCIENTIFIC RESEARCH (3357Y), Grades 10-12, Full Credit Year Course *Prerequisite: Biology and Chemistry*
This elective course involves a year-long commitment to designing and carrying out an experiment based on a scientific research problem.   Each student will choose a research idea to explore.   Students are introduced to research and the use of scientific method, statistics, types of investigations and basic laboratory techniques. Students conduct their own research as much as possible and gather and statistically analyze their data and report their findings to the scientific community. Students are assessed on and will self-assess their own oral presentations, portfolios and written reports.   Students will enter their projects in the Central Virginia Regional Science Fair.

COMPUTER SCIENCE

EXPLORING COMPUTER SCIENCE (3750Y), Grades 9-12, Full Credit Year Course *Prerequisite: Algebra I*
Exploring Computer Science is a yearlong course consisting of 6 units, approximately 6 weeks each.   The course was developed around a framework of both computer science content and computational practice. Assignments and instruction are contextualized to be socially relevant and meaningful for diverse students. Units utilize a variety of tools/platforms, and culminate with final projects around the following topics: Human Computer interaction; problem solving; web design; computing and data analysis; and robotics.

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COMPUTER SCIENCE
(continued)

AP COMPUTER SCIENCE PRINCIPLES (3760Y), Grades 10-12, Full Credit Year Course *Prerequisite: Algebra I*

AP Computer Science Principles is designed to introduce students to the central ideas of computer science, to instill ideas and practices of computational thinking, and to have students engage in activities that show how computing changes the world. The course is rigorous and rich in computational content, includes computational and critical thinking skills, and engages students in the creative aspects of the field. Through both its content and pedagogy, this course aims to appeal to a broad audience. Computational thinking practices include connecting computing, creating computational artifacts, abstracting, analyzing problems and artifacts, communications and collaborating. **All students are required to take the advanced placement examination in May.**

ADVANCED PLACEMENT (AP) COMPUTER SCIENCE (3729Y), Grades 10-12, Full Credit Year Course
Prerequisite: Computer Programming or Teacher Recommendation

A large part of the course is built around the development of computer programs that correctly solve a given problem. At the same time, the design and implementation of computer programs is used as a context for introducing other important aspects of computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods. **All students are required to take the AP examination in May. This course may be able to qualify for math, science, or career tech credit based on certain conditions. See your school counselor for information.**

SOCIAL STUDIES

WORLD GEOGRAPHY (4690Y), Grade 9, Full Credit Year Course

The focus of these classes is the study of the world's peoples, places, and environments, with an emphasis on world regions. This course is designed primarily for students seeking the standard high school diploma. **Near the end of the school year, the students will take the Virginia World Geography Standards of Learning test.**

WORLD HISTORY & GEOGRAPHY I (to 1500 AD) (4290Y), Grade 9, Full Credit Year Course

These classes cover the historical development of people, places, and patterns of life from early times until about 1500 AD. Geography is emphasized in the study of each civilization. These classes are designed primarily for students seeking the standard high school diploma. **Near the end of the school year, students will take the World History and Geography I Standards of Learning test.**

SOCIAL STUDIES (continued)

ADVANCED WORLD HISTORY & GEOGRAPHY I (to 1500 AD) (4397Y), Grade 9, Full Credit Year Course

These classes cover the historical development of people, places, and patterns of life from early times until about 1500 AD. Geographic influences on history are emphasized in the study of each civilization. In these advanced-level classes students must complete in-depth projects and writing assignments, as well as additional reading assignments and research. **Near the end of the school year, students will take the World History and Geography I Standards of Learning test.**

WORLD HISTORY & GEOGRAPHY II (1500 AD to PRESENT) (4200Y), Grade 9 or 10, Full Credit Year Course

These classes cover history and geography from the late Middle Ages to the present. Other points of focus are the political boundaries that developed with the evolution of nation-states; the ways in which scientific and technological revolutions produced economic, social and political change; and the people and events of the 19th and 20th centuries as they relate to contemporary issues. **Near the end of the school year, students will take the World History and Geography II Standards of Learning test.**

ADVANCED WORLD HISTORY & GEOGRAPHY II (1500 AD to PRESENT) (4307Y), Grade 10, Full Credit Year Course

These classes cover history and geography from the late Middle Ages to the present. Other points of focus are the political boundaries that developed with the evolution of nation-states; the ways in which scientific and technological revolutions produced economic, social and political change; and the people and events of the 19th and 20th centuries as they relate to contemporary issues. Projects, writing assignments, additional reading assignments, and research are requirements of these classes. **Near the end of the school year, students will take the World History and Geography II Standards of Learning test.**

ADVANCED PLACEMENT (AP) WORLD HISTORY (4469Y), Grades 10-12, Full Credit Year Course

This course is designed for students with a keen interest in history and a desire to earn college credit in high school. Requiring extensive independent reading and writing assignments, this course has as its chronological frame the period from approximately 8000 B.C.E. to the present. Course work focuses on continuity and change across historical periods as students analyze the processes and causes involved in these continuities and changes. Included in the course are the major civilizations in Africa, the Americas, Asia, and Europe. **All students are required to take the advanced placement examination in May.** *Note: These classes may be taken at the 10th grade level for social studies credit in lieu of Advanced World History & Geography II (1500 AD to Present).* **Tenth grade students choosing this option will take the World History and Geography II Standards of Learning test near the end of the school year.** *Eleventh and 12th grade students may take the class for elective credit.*

SOCIAL STUDIES (continued)

AMERICAN HISTORY (4210AY), Grade 11, Full Credit Year Course

These classes are a chronological study of American history from the Age of Discovery to the present. Although emphasis is placed on political and economic history, content also includes the major issues, movements, people, and events that shaped American culture. **Near the end of the school year, students will take the Virginia/U.S. History Standards of Learning test.**

ADVANCED AMERICAN HISTORY (4317Y), Grade 11, Full Credit Year Course

These advanced-level classes provide a comprehensive, in-depth study of American history from the Age of Discovery to the present. Although emphasis is placed on political and economic history, content also includes the major issues, movements, people, and events that shaped American culture.   Independent reading and writing assignments, as well as individual research projects, are required. **Near the end of the school year, students will take the Virginia/U.S. History Standards of Learning test.**

ADVANCED PLACEMENT (AP) AMERICAN HISTORY (4419Y), Grade 11, Full Credit Year Course

These classes are geared to the student who has a keen interest in history and who wishes to receive college credit while in high school. During 1st semester, emphasis is on the American Revolution, the Jacksonian period, the Civil War, Reconstruction, and the Gilded Age.   Second semester focuses on the politics of the Gilded Age, the Populist-Progressive era, World War I, the Depression and the New Deal, World War II, and domestic and foreign policy from Post World War II to the 1980s. Course requirements include basic text and supplementary readings, class lectures and discussions, and writing assignments (including open-ended and document-based questions). **All students are required to take the advanced placement examination in May. In addition, near the end of the school year, students will take the Virginia/U.S. History Standards of Learning test.**

UNITED STATES GOVERNMENT (4220Y), Grade 12, Full Credit Year Course

These classes provide students with an understanding of the American and Virginia political systems. Included in this study are the United States and Virginia Constitutions; the structure and operation of the legislative, executive, and judicial departments of the U.S. and Virginia governments; the process of policy-making in economics, foreign affairs, and civil rights issues; and the influence of the public, interest groups, political parties, and the media on decision-making. Other points of focus are a comparison of the U.S. political and economic systems to those of other nations and the role of the government in the economy. In addition, special emphasis is given to a unit on individual voting behavior, incorporating current elections.

SOCIAL STUDIES (continued)

ADVANCED UNITED STATES GOVERNMENT (4327Y), Grade 12, Full Credit Year Course

This advanced-level government course focuses on the theory and practice of leadership and political behavior from the social scientist point of view as students study topics such as theories of government, federalism, state and local government, and decision-making at the national level. Additional units of study include the American Free Enterprise System, the law and society, and the involvement of the United States in foreign affairs. As in all advanced-level classes, students must be prepared to complete independent reading, writing, and research assignments.

ADVANCED PLACEMENT (AP) AMERICAN GOVERNMENT POLITICS & COMPARATIVE GOVERNMENT POLITICS (4429Y), Grade 12, Full Credit Year Course

These classes are geared to those students with a keen interest in government and the desire to earn college credit in high school. First semester gives students a critical perspective on politics and government in the United States, involving both the study of general concepts to interpret American politics and the analysis of specific case studies. In 2nd semester, students gain knowledge of the world's diverse political structures and practices as they study five specific countries and compare their key political relationships. Both 1st and 2nd semester classes require student research and analysis. **All students are required to take both advanced placement examinations in May.**

ADVANCED PLACEMENT (AP) EUROPEAN HISTORY (4409Y), Grades 11-12, Full Credit Year Course

These elective classes are designed for students with a keen interest in history and a desire to earn college credit in high school. Requiring extensive independent reading and writing assignments, course work includes an in-depth study during 1st semester of the major events and trends in Europe from approximately 1450 to the Napoleonic Period with significant emphasis placed on intellectual, cultural, and social-economic history. Study 2nd semester continues from the Napoleonic Period to the present. **All students are required to take the advanced placement examination in May.**

AFRICAN-AMERICAN STUDIES (4740Y), Grades 9-12, Full Credit Year Course

This elective course in African American Studies provides a thematic study of African American History from African origins to the present. Students will study the history and culture of African Americans and their contributions and roles in American History. An emphasis throughout the course is on how African American culture has impacted United States History. This course is taught through a variety of literature and with multiple opportunities for class discussion, expository writing, and collaborative projects.

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SOCIAL STUDIES (continued)

ADVANCED PLACEMENT (AP) HUMAN GEOGRAPHY (4459Y) Grades 9-12, Full Credit Year Course

The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). **Near the end of the school year, students will take the World Geography Standards of Learning test.**

INTRODUCTION TO PSYCHOLOGY (4250Y), Grades 10-12, Full Credit Year Course

This is a general overview course focusing on the scientific study of both the behavioral and mental processes of human beings and animals. More specifically, we will be covering: history pf psychology and scientific thought, biological basis of behavior, research methodology, statistics, sensation and perception, states of conscious, memory, language and intelligence, developmental psychology, personality, and learning.

ADVANCED PLACEMENT (AP) PSYCHOLOGY (3439Y) Grades 11 or 12, Full Credit Year Course

The purpose of the course itself is to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their science and practice. **All students are required to take the AP Psychology examination in May.**

HEALTH

DRIVER EDUCATION AND PERSONAL HEALTH & SOCIAL DEVELOPMENT (5240A, 5240B) Grades 9-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: None*

The Driver Education portion will provide the in-class preparation for behind-the-wheel driver training. Personal health and social development fulfills the family life education requirement for grade ten.

HEALTH AND FAMILY LIVING (5250A, 5250B), Grades 9-12 1st or 2nd Sem., One-half Credit. *Prerequisite: None*

This course fulfills the family life education requirement for students in grade nine. The course includes instruction in disease prevention, first-aid techniques, human growth and development, personal health and wellness, substance abuse, consumer health, and topics related to family living. Attitudes, morality and responsible decision making are discussed in relation to developing a healthy and productive lifestyle from adolescence to old age.

PHYSICAL EDUCATION

The Physical Education Program offers a variety of courses designed to meet individual needs and interests; however, the underlying purpose in all courses is to promote the concept of fitness and wellness for life. All courses will include aerobic exercises and strength training in addition to skills development in the specified sports and/or recreational activities. Two semesters of physical education are required for graduation. **These courses may be taken repeatedly for elective credit.**

WEIGHT TRAINING I (5151A, 5151B) Grades 9-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: None*

This <u>introductory</u> course is designed to give students the opportunity to learn weight training concepts and techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and cardio-respiratory endurance activities. Students will learn the basic fundamentals of weight training, strength training, aerobic training, and overall fitness training and conditioning. Course includes both lecture and activity sessions. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.

WEIGHT TRAINING II (5152A, 5152B) Grades 9-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: None*

This <u>intermediate</u> course is designed to give students the opportunity to learn weight training concepts and techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and cardio-respiratory endurance activities. Students will learn the basic fundamentals of weight training, strength training, aerobic training, and overall fitness training and conditioning. Course includes both lecture and activity sessions. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.

PHYSICAL EDUCATION DRILL (5140A, 5140B), Grades 9-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Enrollment in ROTC I or completion of ROTC I.*

This course is designed to develop knowledge and skills related to flexibility, strength training, personal fitness, and drill activities.

PHYSICAL EDUCATION 9 (5190A, 5190B), Grades 9-12, 2nd Sem., One-half Credit. *Prerequisite: None*

This course is designed to develop intermediate and advanced skills in activities selected from among the following: floor or field hockey, lacrosse, softball, volleyball and basketball.

PHYSICAL EDUCATION 10 (5191A, 5191B), Grades 9-12, 1st Sem., One-half Credit. *Prerequisite: None*

This course is designed to develop intermediate and advanced skills in activities selected from among the following: flag football, soccer, basketball, tennis, and track and field.

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PHYSICAL EDUCATION
(continued)

FITNESS FOR LIFE (5161A, 5161B) Grades 9-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: None*

This course will enable students to obtain the knowledge and skills necessary to develop and maintain a health-enhancing level of fitness and to increase physical competence, self-esteem and the motivation to pursue lifelong physical activity. Students will gain an understanding of the components of health-related fitness, training principles, and the benefits of being physically active. Students will participate in activities that will increase physical fitness levels and develop health practices that value physical activity and its contribution to lifelong fitness. Students will exhibit a physically active lifestyle through participation in one or more lifetime sports or activities of their own choosing.

FOUNDATIONS OF PERSONAL FITNESS & WELLNESS (5931YS) Grades 9-12, <u>Summer Only</u>, One Credit.
Prerequisite: None

This course fulfills one of the standard units of credit in Health and Physical Education required to graduate. Using an online approach, the course covers both health and physical education standards. The course is broken into modules that contain the learning content and activities to be completed. Students will be assigned to a licensed Lynchburg City Schools' Health/Physical Education teacher who will monitor, assist, and evaluate. For the Physical Education component, students will study and engage in applications of movement by (1) developing a personal fitness plan aimed at improving motor skills, movement patterns, strength, flexibility, and endurance and (2) completing online units of study focusing on overall wellness – their physical, mental, and emotional health and development. Units include nutrition and diet, and the functions and structures of various systems of the body, including the digestive, urinary, endocrine, and reproductive systems. Units covering the state's 9th grade Family Life Education SOLs are included. Topics include family living and community relationships; the benefits, challenges, responsibilities, and value of positive relationships for men, women, and children, and communities; abstinence education; the value of postponing sexual activity; human sexuality; human reproduction; dating violence; the characteristics of abusive relationships; steps to take to avoid sexual assault; and the availability of counseling and legal resources. Students will also study the consequences of risky behaviors and disease prevention.

CAREER-TECHNICAL EDUCATION

Career-Technical Education is an essential part of the school division's total educational program specifically designed to prepare students for gainful employment and/or post-secondary education or training.

Career and Technical Education provides sequences of career-related courses designed to help students develop skills needed for entry-level employment, advanced technical training programs, and continuing education on the college and university level.

Elective courses in each program area focus on helping students develop twenty-first century job skills, such as, proficiency in computer technology, information acquisition and processing, problem solving, teamwork, and effective communication skills.

Career and Technical Education courses are designed to enhance and support the academic curriculum - reinforcing the Standards of Learning established for English, mathematics, science, and history & social science.

ARCHITECTURE & CONSTRUCTION

Courses in this area can prepare students for careers in designing, planning, managing, building and maintaining the built environment.

DRAFTING III (6760Y), (formerly Architectural Drawing) Grades 10-12, Full Credit Year Course *Prerequisite: Drafting I (6740) & is preferable that students have complete Algebra I*

This upper-level course begins with the basics of residential design and progresses through an entire set of house plans. The students will learn architectural CAD software, as a tool for creating professional, three-dimensional architectural designs and drawings. The students will design and build model displays as projects. The students will also be given the opportunity to compete in regional and state competitions in architectural design and modeling.

CONSTRUCTION TECHNOLOGY (8431Y), Grades 10 & 11, Heritage High, Full Credit Year Course *Prerequisite: None*

Students will be introduced to three general areas of study including carpentry, electrical wiring, and plumbing in this course. Students will design, build, and test scale model structures and work with projects that help them to understand the jobs of architects, carpenters, electricians, plumbers, surveyors, contractors, design engineers, and a variety of other construction careers. *Maximum number of students per class 20.*

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ARCHITECTURE & CONSTRUCTION (continued)

BUILDING TRADES I (8240Y), Grade 11, Heritage High, Full Credit Year Course *Prerequisite: Approved Application*
>**This is a double-period course**. This course is designed to prepare individuals to erect, install, maintain and repair buildings and other structures. Carpentry, masonry, electricity, and plumbing will be emphasized. Also included is instruction in cost estimating, cutting, fastening, and fitting various materials, using hand and power tools and following technical specifications and blueprints. *Maximum number of students per class 20.*

BUILDING TRADES II (8250Y) Grade 12, Heritage High, Full Credit Year Course *Prerequisite: Building Trades I (8240Y)*
>**This is a double-period course**. Course content includes construction, customer relations, job pricing, custom construction, and installing interior millwork. Building Codes will be stressed in carpentry, painting, electrical, plumbing and masonry. The course also includes special emphasis on job opportunities, project management, and job integrity in the construction trades. *Maximum number of students per class 20.* **This course may be taken as a dual-enrollment course earning 6 college credits from Central Virginia Community College under the course numbers 8258AC, 8258BC (CVCC course numbers are BLD 149 (3 credits) and BLD 249 (3 credits).**

ARTS, A/V TECHNOLOGY & COMMUNICATIONS

Courses in this area can prepare students for careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

COMMUNICATION SYSTEMS A & B (8561A, 8561B) Grades 10-12, Heritage High, 1st or 2nd Sem. One-half Credit.
Prerequisite: None
>This is an introduction class for students preparing for jobs as advertising artists, and illustrators. Students learn both hand and computer generated layout and illustration used for brochures, posters, catalogues, advertisements and logos. Students learn skills in the areas of advertising design, illustration, printing advertisements, digital photography, and digital imaging

VIDEO AND MEDIA TECHNOLOGY (7450A & 7450B) Grades 10-12, E.C. Glass and Heritage High, 1st & 2nd Sem., One-half Credit per Sem. *Prerequisite: None*
>This course offers students an opportunity to study all aspects of video and media production, from planning and writing for production to operating studio and editing equipment. Students practice various methods of gathering news and information from individuals, research, and online resources. In addition, students are introduced to analog and digital principles of film production.

BUSINESS, MANAGEMENT, ADMINISTRATION & FINANCE

Courses in this area can prepare students for careers in Business Management and Administration and Finance, careers that encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration and Finance career opportunities are available in every sector of the economy.

ACCOUNTING I (6160Y), Grades 10-12, Full Credit Year Course *Prerequisite: None*
>Content includes theory of basic bookkeeping, use of journals and ledgers, worksheets, and income statements. Also included is the preparation of financial records, taxes and payroll projects; special problems related to sales and purchases. Students learn fundamental accounting procedures using a manual system.

ACCOUNTING II (6170Y), Grades 11 or 12, 1st & 2nd Sem., One-half Credit per Sem. *Prerequisite: Accounting I (6160 A & B) and Keyboarding (6240)*
>Content includes management of financial records through various business activities, partnership accounting, and general ledger. Students use manual accounting skills to analyze and interpret accounting transactions. Also included is the study of corporate and cost accounting and budgetary controls.

BUSINESS MANAGEMENT (6140A) Grades 11 or 12, 1st Sem., One-half Credit. *Prerequisite: None*
>This one-semester course includes an overview of American business and the social and economic environments in which it operates. Main topics of study are economics, business finance, and personnel administration. Members of the class start and operate a corporation through Junior Achievement.

BUSINESS LAW (6150B) Grades 11 or 12, 2nd Sem., One-half Credit. *Prerequisite: Business Management*
>This course is focused on personal law, the law of contracts and the rights and responsibilities of individuals in our society. Laws affecting daily business contracts and employment are emphasized.

COMPUTER APPLICATIONS (3740A, 3740B), Grades 9-12, 1st & 2nd Sem., One-half Credit per Sem. *Prerequisite: None. Keyboarding skills recommended.*
>This course develops skills and provides experience with major computer applications. These applications include word processing (using both text and graphics-based programs), spreadsheet, database, and integration of applications. Students use these applications for problem solving and file and disk management. Keyboarding and general computer understanding are addressed as needed. Also included is work with multi-media research, the Internet, presentations, desktop-publishing, video conferencing and digital cameras, computer graphics, and computer communications.

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BUSINESS, MANAGEMENT, ADMINISTRATION & FINANCE (continued)

COMPUTER INFORMATION SYSTEMS (6340Y) Grades 11 or 12, Heritage High, Full Credit Year Course *Prerequisite: Keyboarding (6240)*

This course develops skills and provides experience with the major business applications of the microcomputer. These include Microsoft Windows and word processing using Microsoft Office. Also included are business computer terminology, systems and procedures, spreadsheets, database management, desktop publishing, and presentation graphics using Microsoft Office. Students will attempt the Internet and Computing Core Certification (IC3) exam. The IC3 exam is offered through Certiport.

DESIGN, MULTIMEDIA, & WEB TECHNOLOGIES (6260A, 6260B), Grades 9-12, 1st or 2nd Sem., One-half credit *Prerequisite: Keyboarding (6240) or equivalent skills*

Students develop proficiency in creating desktop publications, multimedia presentations/projects, and web sites using industry standard application software. Students incorporate principles of layout and design in completing publications and projects. Students design portfolios that may include business cards, newsletters, mini-pages, web pages, multimedia presentations, and projects, calendars, and graphics. Completion of this course may prepare students for industry certifications.

KEYBOARDING (6240A, 6240B) Grades 9-12, 1st or 2nd Sem., One-half credit *Prerequisite: None*

Students develop touch skills for entering alphabetic, numeric, and symbol information on a keyboard. Students compose and produce a variety of personal, educational, and professional documents.

KEYBOARDING APPLICATIONS (6250A, 6250B), Grades 9-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Keyboarding (6240) or mastery of touch typing*

Students apply keyboarding skills to create and edit a variety of personal and business documents including announcements, memos, various business letter styles, tables, forms, reports (including bibliography page, title page, and tale of contents), labels and envelopes. Students will utilize formatting functions, including margins and justification, font sizes and styles, line spacing, word wrap, bullets and outline features, spell check, and thesaurus. Special emphasis is placed on speed, accuracy and production. Proofreading and editing skills are also address as is the ability to compose at the keyboard.

PRINCIPLES OF BUSINESS AND MARKETING A & B (6370A, 6370B), Heritage High, Grades 9-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: None*

Students explore the role of business and marketing in the free enterprise system and the global economy. They study how the American economy operates as they prepare to make decisions as consumers, wage earners, and citizens.

EDUCATION & TRAINING

Courses in this area can prepare students for careers in planning, managing and providing education and training services or related learning support services.

EARLY CHILDHOOD EDUCATION I (6541Y), Grade 11, Heritage High, Full Credit Year Course *Prerequisite: Approved Application*

This is a double-period course. Students prepare to be primary providers of home-, family-, or institution-based child care services by focusing their study on the planning, organizing, and conducting of meaningful play and learning activities; child monitoring and supervision; record keeping; and referral procedures. Teachers highlight the basic skills of math, science, and communication when appropriate. *Maximum number of students per class 20.*

EARLY CHILDHOOD EDUCATION II (6542Y), Grade 12, Heritage High, Full Credit Year Course *Prerequisite: Early Childhood Education I (6541)*

This is a double-period course. Students prepare for positions in child care centers as child care attendants, kindergarten aides, or child care assistants; as foster parents; or as entrepreneurs. Opportunities for mentorship under the supervision of the instructor will be a part of the class curriculum. Teachers highlight the basic skills of math, science, and communication when appropriate in the content. Completion of this sequence may prepare students for the Child Development Associate (CDA) National Credential by the Council for Professional Recognition. *Maximum number of students per class 20.*
This course may be taken as a dual- enrollment course for 6 college credits from Central Virginia Community College under numbers 6548AC, 6548BC. CVCC course numbers CHD 120 (3 credits) and CHD 165 (3 credits).

TEACHERS FOR TOMORROW (6550Y), Grades 11 & 12, Full Credit Year Course, E.C. Glass and Heritage High School, *Prerequisite: Have & maintain a minimum 2.7 grade point average. Submit three satisfactory teacher recommendations, a brief essay & application to Lynchburg College (a special application form will be used)*

Virginia's Teachers for Tomorrow Program is offered to high school juniors and seniors interested in pursuing a career in teaching and education. Students will experience the profession as they are guided through the history of education and the functions of schools and school divisions. Additionally, the students will experience the classroom as they become acquainted on a personal and professional level with teachers and teaching; including a brief internship in a classroom setting. **This course may be taken as a dual-enrollment course earning 4 college credits from Lynchburg College under the LCS course numbers 6558AC and 6558BC. The LC course numbers are EDUC 101 (3 credits) and EDUC 202 (1 credit).**

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HEALTH SCIENCES

Courses in this area can prepare students for careers in planning, managing, and providing therapeutic services, diagnostic services, health information science, support services, and biotechnology research and development.

HEALTH AND MEDICAL SCIENCES EXPLORATORY (6840A, 6840B), Grades 9-12, E. C. Glass High, 1st or 2nd Sem., One-half Credit. *Prerequisite: None*

This is an exploratory course which is recommended as a prerequisite to Dental Careers. Students will focus on careers in the health field by exploring their own interest, values, and abilities. They will learn basic first-aid skills and develop an understanding of the characteristics and make-up of a variety of health careers. Students will gain knowledge necessary to make an informed career choice.

DENTAL CAREERS I (6810Y) Grade 11, E. C. Glass High, Full Credit Year Course *Prerequisite: Approved application (Health and Medical Sciences Exploratory (6840) is recommended)*

This is a double-period course. This is a double period health occupational preparatory course. Students learn dental anatomy, care and sterilization of instruments, and basic oral hygiene skills. Topics include: clinical skills necessary to assist the dentist in the routine function of a dental office, chair-side dental procedures, instrument set- up, and basic laboratory procedures including material manipulation. *Maximum number of students per class 20.*

DENTAL CAREERS II (6820Y) Grade 12, E. C. Glass High, Full Credit Year Course *Prerequisite: Dental Careers I (6810)*

This is a double-period course. Students continue developing their skills and mastering competencies through classroom instruction and simulated clinical experiences. Topics include: taking and processing dental x-rays, laboratory procedures, and identification of instruments and material manipulation. Students receive Dental Radiation Safety and Hygiene certification upon satisfactory completion of the unit test. The final part of the Dental Careers program combines classroom instruction with actual hands-on training with area dentist, assistants, hygienist, and laboratory technicians. The clinical training will take place during the regular school hours and will be graded but not necessarily for pay. Classroom instruction will include entry level clerical skills as well as clinical skills. *Maximum number of students per class 20.*

NURSE AIDE I (8360Y), Grades 11 & 12, Heritage High School, Full Credit Year Course *Prerequisite: Approved Application; Health and Medical Sciences Exploratory (6840) is recommended.*

This is a double-period class. Virginia Board of Nursing approved course to qualify for the Certified Nurse Aide Exam. This course features a dual focus on theory and practical skills. The theory component includes basic anatomy and physiology, ethics, health care systems, medical terminology, and professionalism. The skills are taught in the nursing lab and include transfer techniques, assessment of vital signs, assisting with patient hygiene and grooming, and infection control procedures.

HEALTH SCIENCES
(continued)

NURSE AIDE II (8362Y), Grade 12, Heritage High School, Full Credit Year Course *Prerequisite: Nurse Aide I (8360)*

This is a double-period course. Virginia Board of Nursing approved course to qualify for the Certified Nurse Aide Exam. This course integrates the principles and skills introduced in Nurse Aide I. Students practice skills and concepts from the course in a closely supervised clinical setting. The course also includes preparation for the Virginia certification exam.

ATHLETIC TRAINING I (5260Y), Grades 10-12, E.C. Glass and Heritage High, Full Credit Year Course *Prerequisite: Interest in athletic training and permission of the instructor*

Students interested in athletic training as a career, physical therapy, or medicine should consider these courses. Sports medicine will be covered from three aspects: recognition of injuries; prevention of injuries; and rehabilitation of injuries. Some lab work with athletic teams may be required.

ATHLETIC TRAINING II (5261Y), Grades 10-12, E.C. Glass and Heritage High, Full Credit Year Course *Prerequisite: Athletic Training I (5260) and permission of the instructor*

Students continue their study of sports medicine topics from three aspects: recognition of injuries; prevention of injuries; and rehabilitation of injuries. Some lab work with athletic teams may be required.

HOSPITALITY & TOURISM

Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services.

INTRODUCTION TO HOSPITALITY, TOURISM AND RECREATION (6440Y), Grades 10-12, Full Credit Year Course, E.C. Glass and Heritage High, *Prerequisite: None*

Students enrolled in the Introduction to Hospitality, Tourism and Recreation focus on developing professional skills and using emerging technologies to prepare for employment in this global industry, rich in diverse career opportunities. The program includes instruction in the industries of lodging, food and beverage, travel and tourism, and recreation and fitness. *Maximum number of students per class 20.*

CULINARY ARTS I (6441Y), Grades 10-11, E.C. Glass and Heritage High, Full Credit Year Course *Prerequisite: Approved Application*

This is a double-period course. Students are taught the managerial, production, and service knowledge and skills used in government, commercial, or independently owned institutional food establishments and related food industry occupations. This course includes planning, selecting, storing, purchasing, preparing, and serving food and food products; basic nutrition, sanitation, and food safety; the use and care of commercial equipment; serving techniques; and the operation of institutional food establishments. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. *Maximum number of students per class 20.*

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HOSPITALITY & TOURISM
(continued)

CULINARY ARTS II (6442Y), Grades 11-12, E. C. Glass and Heritage High, Full Credit Year Course *Prerequisite: Culinary Arts I (6441)*

This is a double-period course. Students extend and expand skills learned in Culinary Arts I, preparing for occupations such as chef/cook, baker/pastry helper, pastry decorator, hospitality worker, dietetic aide/assistant, food demonstrator, mixologist, and entrepreneur. Opportunities for mentorships under the supervision of the instructor will be a part of the class curriculum. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. Teachers highlight the basic skills of math, science, and communication when appropriate in content. ***Maximum number of students per class 20. This course may be taken as a dual enrollment course for six college credits from CVCC under numbers 6448AC and 6448BC. CVCC course** are HRI 106 (3 credits) and HRI 158 (3 credits).*

CULINARY ARTS SPECIALIZATION (6443Y), Grade 12, E. C. Glass and Heritage High, Full Credit Year Course *Prerequisite: Culinary Arts I (6441); Culinary Arts II (6442)*

The Culinary Arts Specialization curriculum provides students with continuing opportunities to obtain comprehensive knowledge of the food service industry as well as to expand their technical skills in a food service specialty. Students explore careers and refine their skills in implementing safety and sanitation standards, applying nutritional principles, planning menus, using business and math skills, and selecting and maintaining food service equipment. Students specialize in one of the following four areas: Baking and Pastry Food Preparation Techniques; Catering/Banquet Food Preparation Techniques; Restaurant Operation Techniques; or Quantity Food Preparation Techniques. The curriculum continues to place a strong emphasis on science and mathematics knowledge and skills as it emphasizes critical thinking, practical problem solving, and entrepreneurial opportunities within the field of culinary arts. Spots are limited.

HUMAN SERVICES

Preparing individuals for employment in career pathways that relate to families and human needs.

COSMETOLOGY I (8340Y), Grade 11, Heritage High, Full Credit Year Course *Prerequisite: Approved Application*

This is a double-period course. The course includes professional ethics, hygiene, good grooming, manicuring, and hair shaping and styling. This course also includes student practice in scalp and hair treatments, the care and styling of wigs, permanent waving and hair removal. Related topics also include skin, scalp and hair disorders.

COSMETOLOGY II (8350Y), Grade 12, Heritage High, Full Credit Year Course *Prerequisite: Cosmetology 1 (8340)*

This is a triple-period course. The course includes beauty salon management and operation, additional work developing competencies in electricity and light therapy, chemistry, anatomy and physiology, chemical hair relaxing and hair coloring. Students will complete final preparation for taking the state license cosmetology examination.

INFORMATION TECHNOLOGY

Courses in this area can prepare students for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services.

COMPUTER SYSTEMS TECHNOLOGY I (8540Y), Grades 9-11, Heritage High, Full Credit Year Course   *Prerequisite: Approved Application by Instructor*

This course focuses on the soft and technical skills needed to obtain entry-level positions as network, computer, or help-desk technicians. It provides a basic overview of networking concepts, such as LANS, WANS, networking design, setup, and software. Students will study the impact of MMO and LAN gaming on networks, including designing, building, and securing a LAN gaming network. All students will complete the (IC³®) exam by *Certiport*. Students will service microcomputer hardware and support peripherals; build a computer from parts; diagnose, troubleshoot, and resolve personal computer basic hardware and software issues. **This course may be taken as a dual enrollment course earning 3 college credits from Central Virginia Community College under the course numbers 8548AC, 8548BC. The CVCC course number is ETR 149.**

COMPUTER SYSTEMS TECHNOLOGY SYSTEMS II (8550Y), Grades 10-12, Heritage High, Full Credit Year Course *Prerequisite: Computer Systems I (8540) Prerequisite may be waived by instructor if sufficient technical knowledge is proven.*

This is a double period course. This course equips students with the advanced knowledge, skills, and understanding that will enable them to install, troubleshoot and maintain computers and their associated networks. Students diagnose, troubleshoot, and resolve advanced hardware and basic networking issues. Numerous hands-on exercises, including configuring, installing, and troubleshooting operating systems, third party software, and hardware will reinforce student learning and understanding. Creating email accounts, configuring wireless technologies, appropriate use of social media are part of the course work. All students will complete the CompTIA A+ Essentials and A+ Specialization exams. Students may be eligible to participate in a number of certification exams offered through CISCO and CompTIA. **This course may be taken as a dual enrollment course earning 4 college credits from Central Virginia Community College under the course numbers 8558AC, 8558BC. The CVCC course number is ITE 221.**

CYBER SECURITY (8553Y), Grades 9-12, Heritage High School, Full Credit Year Course *Prerequisite: Approved Application*

This is a double period course. This course prepares students for entrance into the career of cyber security, data loss prevention, and network security. The cyber security field is the fastest growing field in the IT industry, and by 2016 will be the most needed profession in the United States. Students will be prepared to take and pass the CompTIA Network+ and Security+ examinations and be able to enter the IT security field directly from high school, if they choose. Topics of study include: Linux Operating Systems; OSI model; TCP model; Local and WAN security; ethical hacking (white hat); security careers and penetration testing.

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INFORMATION TECHNOLOGY
(continued)

**INFORMATION TECHNOLOGY ASSISTANT I (7140Y),
Grades 10-12, Full Credit Year Course**

This course is designed to develop students' understanding of technical support as an assistant to the Instructor, a trained Help Desk professional. Students will learn how to diagnose, troubleshoot, and resolve computer and tablet hardware and software problems. Students will develop an understanding of the logistics of properly documenting problems and solution. Students will develop technical problem solving skills through hands-on, supervised experience.

**INFORMATION TECHNOLOGY ASSISTANT II (7150Y),
Grades 10-12, Full Credit Year Course** *Prerequisite: Information Technology Assistant I*

This course is designed to further develop students' technical support skills while providing an opportunity for students to step into a leadership role. Students who have completed the first semester course will be challenged with increasingly difficult hardware and software problems. Students will also assist the instructor with prioritizing, planning, and scheduling tasks to IT Assistant I students and ensure work is completed correctly and in a timely manner.

LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

Courses in this area prepare students for careers in planning, managing, and providing legal, public safety, protective services, and homeland security, including professional and technical support services.

CRIMINAL JUSTICE I (8702Y), Grades 11-12, E.C. Glass High School, Full Credit Year Course *Prerequisite: Approved Application*

This course presents an overview of the criminal justice system and introduces the major components in law enforcement, judiciary, and corrections. Students learn theory, principles, and techniques of developing/managing services for the safety and protection of people and property. Students will participate in lessons on and off campus and in activities that take place after-school hours. Students enrolled in this course are expected to join and participate in SkillsUSA.

CRIMINAL JUSTICE II (8703Y), Grades 11-12, E.C. Glass High School, Full Credit Year Course *Prerequisite: Approved Application*

This course covers the complex responsibilities of criminal investigation. Students will learn the principles and techniques of conducting specific investigations such as homicide, assault, and robbery. Students will also learn the principles of crime scene investigation including photography, sketching, and the securing of evidence. Students enrolled in this course are expected to join and participate in SkillsUSA.

MANUFACTURING

Courses in this area can prepare students for careers in planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

MANUFACTURING SYSTEMS (8440A, 8440B), Grade 10, E. C. Glass High, 1st or 2nd Sem. One-half Credit.
Prerequisite: None

This is an exploratory course designed to provide an orientation to careers in various fields of manufacturing. Emphasis will be placed on automated machining techniques, blueprint reading, and material identification, fundamental machining operations, welding, construction, plumbing, electricity, building, masonry and safety. Students will work together as well as individually to manufacture and produce useful products. *Maximum number of students per class 20.*

PRECISION MACHINE TECHNOLOGY I (8450Y), Grade 11, E.C. Glass High, Full Credit Year Course *Prerequisite: Approved Application*

This is a double-period course. Content includes safety, hand tools, bench work, layout work, blueprint reading, drilling and tapping, machine shop math, and introduction to the trade. The course also includes precision measuring tools, use of charts and tables, an introduction to the CNC mill and lathe, tool grinding, and surface grinding. *Maximum number of students per class 20.*

PRECISION MACHINE TECHNOLOGY II - INTRODUCTION TO MACHINE TOOLS (8460Y), Grade 12, E.C. Glass High, Full Credit Year Course *Prerequisite: Precision Machine Technology I (8450)*

This is a double-period course. Course content includes metal lathe work, drilling, milling machine, and speed and feed calculations. Drill press work includes drilling and countersinking. Also included is an introduction to computerized vertical milling machine and lathe. Qualified seniors are eligible to participate in a work experience program with local machining companies. *Maximum number of students per class 20.* **This course may be taken as a dual-enrollment course earning 6 college credits from Central Virginia Community College under the course numbers 8468AC, 8468BC. The CVCC course numbers are MAC 161 (3 credits) and 162 (3 credits).**

MARKETING, SALES & SERVICE

Courses in this area can prepare students for careers in planning, managing, and performing marketing activities to reach organizational objectives.

SPORTS, ENTERTAINMENT, AND RECREATION MARKETING (6942Y) Grades 10-12, Heritage High, Full Credit Year Course *Prerequisite: Approved Application*

Sports, Entertainment and Recreation Marketing (SER) is an entry level course offered in the two-year marketing program. This course is designed to develop an understanding of sports, entertainment and recreation marketing and its importance. Students develop fundamental skills for SER event planning, implementing, and evaluating. Students will learn market research, advertising, public relations, professional communications, effective selling, licensing and merchandising, branding, and event safety and security. Students learn career options available in the SER industries as well as develop skills necessary for successful initial employment experiences.

MARKETING I (6951Y), Grades 10-12, Heritage High, Full Credit Year Course *Prerequisite: Approved Application. Continuous part-time employment and/or project plan and DECA membership are required.*

Content includes risk management, product planning, communicating effectively and selling techniques. In special situations, a project plan may be substituted for the work experience requirement. This option must be teacher approved in advance. Content also includes relationships with employers, co-workers, and customers, advertising, inventory, safety, ad layout, display, free enterprise system, pricing, and economics.

MARKETING II (6960Y), Grade 10-12, Heritage High, Full Credit Year Course *Prerequisite: Marketing I (6950) or Sports, Entertainment and Recreation Marketing (6942). Continuous part-time employment and/or project plan and DECA membership are required.*

Students earn one-half credit per semester for the classroom component of this course and another one-half credit per semester for the required 360 hours of on-the-job training each semester. Content includes human resource, marketing research, creative selling, payroll, merchandising, determining profit, and purchasing. In special situations, a project plan may be substituted for the work experience requirement. This option must be teacher approved in advance. Content also includes supervisory communications, personnel management, leadership styles, supervision of sales promotion, supervision of product transportation, and responsibilities of supervisory and mid-management personnel. **If, in an exceptional case, a student is only able to participate in the classroom component, one-half credit per semester can be earned under the course numbers 6370A or 6370B.**

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

Courses in this area can prepare students for careers in planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

DRAFTING I (6740Y), (formerly Basic Technical Drawing) Grades 9-12, Full Credit Year Course *Prerequisite: It is preferable that students have completed Algebra I.*

This entry-level course is designed with an emphasis on the basic principles of drafting and sketching techniques, object visualization, the application of math concepts, and basic through intermediate computer assisted drawing (CAD) applications. Although 2D CAD techniques are emphasized, students also learn 3D modeling techniques at the end of the course. Students may be given the opportunity to compete in regional and state CAD competitions.

DRAFTING II (6750Y), (formerly Engineering Drawing) Grades 10 -12, Full Credit Year Course *Prerequisite: Drafting I (6740) & it is preferable that students have completed Algebra I*

This advanced-level course begins with sharpening skills learned in Basic Technical Drawing on the Computer Assisted Drafting (CAD) software. Students will be able to construct three-dimensional and solids drawings, as well as assembly drawings. As students' skills progress, CAD will be used as a tool to assist in completing design projects of increasing difficulty. Engineering principles are introduced and explored through the design projects. Emphasis will be on the development and honing of problem-solving skills and assembling professional design portfolios. The students will also be given the opportunity to compete in regional and state competitions in CAD and engineering design.

DRAFTING III (6760Y), (formerly Architectural Drawing) Grades 10-12, Full Credit Year Course *Prerequisite: Drafting I (6740) & it is preferable that students have completed Algebra I*

This upper-level course begins with the basics of residential design and progresses through an entire set of house plans. The students will learn architectural CAD software, as a tool for creating professional, three-dimensional architectural designs and drawings. The students will design and build model displays as projects. The students will also be given the opportunity to compete in regional and state competitions in architectural design and modeling.

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS (continued)

ADVANCED ROBOTIC WORK/CELL TECHNLOGY (6770A, 6770B), (Nuclear Technology) Grades 11 or 12, 1st & 2nd Sem., One-half Credit per Sem. *Prerequisites: Approved Application & it is preferable that students have completed Algebra I*

The first semester includes study of the evolution and history of robotics with an emphasis on automated and flexible manufacturing. Topics covered will include: machining, welding, electronics, pneumatics/hydraulics, design and mechanics, sensors and controls programming. Students will apply concepts learned in class to mechanical construction with LEG0 and the FIRST Tech Challenge. During the second semester students study nondestructive examination and testing methods in order to examine an object, material, or system without impairing its future usefulness. Students will use visual and optical testing (VT), liquid penetrant testing (PT), magnetic particle testing (MT), radiographic testing (RT), ultrasonic testing (UT), and eddy current testing (ET) to assess various parameters. Students will also cover the basic fundamentals and application of radiation. **This course may be taken as a dual-enrollment course for 3 college credits from Central Virginia Community College under the course numbers 6778AC and 6778BC. The CVCC course number is IND 195.**

TECHNOLOGY FOUNDATIONS A & B (6640A, 6640B), Grades 9-12, Heritage High, 1st or 2nd Sem., One-half Credit. *Prerequisite: None*

Technology Foundations is a modular approach to an academic and technology integrated curriculum. The topics include alternative energy, astronomy, computer- aided drafting, computer graphic design, computer problem-solving, construction technology, desktop publishing, residential modeling, satellite communications, video communications, and weather and meteorology. Presentations, field trips, and guest speakers will complement the modular concept.

TECHNOLOGY TRANSFER A & B (6650A, 6650B), Grades 10-12, Heritage High, 1st or 2nd Sem., One-half Credit. *Prerequisite: Technology Foundations (6640) or Teacher Approval*

Technology Transfer is a course developed around a modular approach. The topics are animation, biotechnology, fiber optics, forensic technology, the Internet, and virtual reality. When the students complete these modules, they will be introduced to advanced levels of the modules they completed in Technology Foundations. This course will assist students in developing problem-solving techniques, using resources and developing critical thinking skills.

TRANSPORTATION, DISTRIBUTION & LOGISTICS

Courses in this area can prepare students for careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

AUTOMOTIVE SERVICE TECHNOLOGY I (8141Y), Grades 9 & 10, E. C. Glass High, Full Credit Year Course
Prerequisite: None

Students learn fundamental skills associated with engine tune-up, electrical diagnosis and repair, lubrication and cooling system diagnosis and repair, brake system diagnosis and repair, basic fuel system diagnosis and repair, basic suspension system diagnosis and repair, and basic routine maintenance of automobiles. *Maximum number of students per class 20.*

AUTOMOTIVE SERVICE TECHNOLOGY II (8140Y), Grades 10 & 11, E.C. Glass High, Full Credit Year Course
Prerequisite: Approved Application

This is a double-period course. Content includes instruction in the safe operation of laboratory power equipment, hand tools, and testing devices. Students learn to access technical data through electronic media and paper manuals. Instruction in proper wheel and brake operation is included. Also included is instruction in diagnostic procedures regarding automotive steering systems and components. Students will learn to assess and repair problems relating to wheels, alignment, suspension, shocks, struts, and axles. *Maximum number of students per class 20.*

AUTOMOTIVE SERVICE TECHNOLOGY III (8150Y), Grades 11-12, E.C. Glass High, Full Credit Year Course
Prerequisite: Automotive Service Technology II (8140)

This is a double-period course. Content includes instruction in diagnostic procedures regarding automotive electrical systems and components and engine performance. Students will learn to assess and repair problems relating to circuits, battery systems, gauges, accessories, and lights. Students will learn to assess and repair problems relating to ignition, fuel, exhaust, and emission control systems. Instructional topics include pumps, carburetors, and associated electronics. Students learn to use testing and scanning equipment to analyze computer and mechanically controlled systems. Instruction will also include reading and interpreting electrical schematics. The second semester of this course provides an opportunity for students to enroll in a work-study program. Students are eligible to take the state A.S.E. Certification test upon completion of this program.

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MARINE CORPS JUNIOR R.O.T.C. LEADERSHIP PROGRAM
Heritage High School Only

This leadership program is a three-year progression of academic courses that can be selected by anyone regardless of grade level. Participation as a fourth year student is limited to very few individuals who are subjectively selected by the leadership department chair as "exceptional" candidates to fill student leadership positions within the organization of the classes. (It is possible to be qualified but not selected due to limited availability of positions.) This program of instruction is designed to emphasize development of positive character traits, self-discipline, responsibility for self and others, and leadership skills. This program is not intended to recruit students for military service; rather, it is intended to develop productive responsible citizens using the military as a role model for teaching these positive lessons. Instructional goals are reached through training in subjects such as close order drill, marksmanship, physical fitness, leadership traits/principles, and first aid/CPR. Course Prerequisites:

1. Students must have a completed school physical and be able to participate in physical fitness activities such as calisthenics, running, hiking, climbing, and jumping. Inability to participate must be temporary and documented by appropriate medical authority.

2. Students must conform to U. S. Marine Corps standards regarding wearing of the uniform, haircuts/hairstyle/color, make-up/jewelry, body piercing, tattoos, shave and fingernail polish. Military uniforms are worn in this class simply because they are provided free of charge to the students.

3. Students must be willing to follow the direction given by the teacher and students in leadership positions acting in accordance with the rules and articles governing the program.

4. Students must be willing to participate in community service activities as extracurricular events necessary for attainment of points required for promotion to higher position within the program. (Simply attending class during the school day will not be sufficient to earn advancement and continuance in the program.)

MCJROTC LEADERSHIP EDUCATION I A & B (5710A, 5710B), All Grades, Heritage High only, 1st & 2nd Sem., One-half Credit Per Sem., *1st Sem. Prerequisite: listed above; 2nd Sem. Prerequisite: Completion of 5710 with a course average of 70% or higher.*

This is an introductory course designed to provide basic knowledge in leadership training and self-discipline through close order drill, physical fitness, marksmanship, professional personal appearance through care and wearing of uniforms, and professional courtesy. Emphasis on this level is placed on personal goal setting, self-discipline and following direction.

MCJROTC LEADERSHIP EDUCATION II A & B (5720A, 5720B), All Grades, Heritage High only, 1st & 2nd Sem., One-half Credit Per Sem., *1st Sem. Prerequisite: Completion of 5710B with a course average of 70% or higher **& attainment of the rank of Cadet Lance Corporal.** (Promotion requirement worksheets detailing promotion requirements available upon request). 2nd Sem. Prerequisite: Completion of 5720 with a course average of 70% or higher.*

The level of this course is more advanced than 1A&B and provides general study within each major area listed in 1A. Emphasis is placed on setting group goals, teamwork, individual responsibility, and accountability.

MARINE CORPS JUNIOR R.O.T.C. LEADERSHIP PROGRAM (continued)
Heritage High School Only

MCJROTC LEADERSHIP EDUCATION III A & B (5730A, 5730B), All Grades, Heritage High only, 1st & 2nd Sem., One-half Credit Per Sem., *1st Sem. Prerequisite: Completion of 5720 with a course average of 70% or higher **& attainment of the rank of Cadet Sergeant.** (Promotion requirement worksheets detailing promotion requirements available upon request). 2nd Sem. Prerequisite: Completion of 5730 with a course average of 70% or higher.*

The level of this course is more advanced than 2A&B with emphasis on attainment of group goals, personal initiative, responsibility for others, and accountability. Student leaders are normally selected from the second semester of this class.

MCJROTC LEADERSHIP EDUCATION IV A & B (5740A, 5740B), Selected Students, Heritage High only, 1st & 2nd Sem., One-half Credit Per Sem., *1st Sem. Prerequisite: Selection by the leadership department chair as well as completion of 5730B with a course average of 70% or higher **& attainment of the rank of Cadet Gunnery Sergeant.** 2nd Sem Prerequisite: Selection by the SMI and MI as well as completion of 5740 with a course average of 70% or higher*

This course, the final year of the four-year MCJROTC LEADERSHIP EDUCATION program, focuses on demonstrating mastery of leadership skills through practical application as a student leader. Students must be prepared to complete independent reading, writing, and research assignments/special projects.

AIR FORCE JUNIOR R.O.T.C. LEADERSHIP PROGRAM
E.C. Glass High School only

AFJROTC is available at two levels, basic and advanced. The program teaches respect for both constituted authority and parents, and self-respect. It teaches orderliness, patriotism, personal honor, and self-reliance. It provides information on aerospace and develops a background that many find valuable

in aviation and space careers, such as the social and physical sciences, navigation, propulsion systems, and the history and theory of flight. No obligation to the military services or college ROTC programs is incurred; however, advanced standing can be earned. A uniform is provided by the Air Force to be worn one day per week and at special functions.

AFJROTC I A & B (5750A, 5750B), Grades 9-12, E.C. Glass High only, 1st & 2nd Sem., One-half Credit Per Sem., *Prerequisite: None*

This course includes study of the history of aviation and space exploration, customs and courtesies of military service, and introduction to basic drill procedures. This course also includes study of aviation weather in the aerospace environment, aerospace careers, and drill and ceremonial procedures of the squad and flight.

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AIR FORCE JUNIOR R.O.T.C. LEADERSHIP PROGRAM (continued)
E.C. Glass High School only

AFJROTC II A & B (5760A, 5760B), Grades 9-12, E.C. Glass High only, 1st & 2nd Sem., One-half Credit Per Sem., *Prerequisite: 5750*

Content includes theory of flight, aircraft propulsion systems, air navigation, introduction to military justice, and a review of drill and ceremonies at the flight level. Also included is study of aerospace vehicles; aircraft, rockets and missiles, techniques of managing squadron size drill formation, and methods of military instruction.

AFJROTC III A & B (5770A, 5770B), Grades 10-12, E.C. Glass High only, 1st & 2nd Sem., One-half Credit Per Sem., *Prerequisite: 5760*

The course includes study of rocketing and spacecraft fundamentals, review of drill and ceremonies at squadron level; introduction to leadership principles and methods. Also included is the aerospace community, leadership qualities and techniques needed in the space age, vocational and educational opportunities available in aerospace enterprises, and an introduction to military management.

AFJROTC IV A & B (5780A, 5780B), Grades 11 & 12, E.C. Glass High only, 1st & 2nd Sem., One-half Credit Per Sem., *Prerequisite: 5770*

Content includes study of geopolitics, psychological foundation of leadership, military management, review of drill and ceremonies. Also included is the influence of human behavior in leadership, responsibilities and techniques of leadership, student planning and execution of instructional and co-curricular activity, introduction of survival training, and a study of Career Officer and Enlisted programs in the military services.

MUSIC

Band classes at the high school level are performance oriented and require the recommendation of the instructor for admission. Participation in performances and rehearsals outside school hours are required. Students will be recommended for the most appropriate program. Marching Band is an after-school activity that begins two weeks before school starts and continues through the fall season. It is extracurricular and carries no academic credit. Marching Band may be activated periodically in the spring and summer. Concerts are performed during the winter and spring. Although all band students are encouraged to perform in the Marching Band, it is not an absolute requirement. Non-band students are also eligible to try out for Marching Band as either musicians or flag and rifle corps members.

*Chorus classes at the high school include both introductory and performance oriented programs. All require placement by or recommendation of the instructor. Both the Concert Choir (**Chorus II**) and the Ensemble (**Chorus III**) require participation in performances and rehearsals during and outside school hours.*

MUSIC (continued)

Orchestra instruction at the high school level is performance oriented and some afternoons and evenings are required for rehearsals and performances.

CONCERT BAND I (5340Y), Grades 9-12, Full Credit Year Course *Prerequisite: Staff Recommendation*

Topics include developing competency in sight-reading, dynamics, rhythm interpretation, balance, and intonation.

SYMPHONIC BAND I (5350Y), Grades 9-12, Full Credit Year Course *Prerequisite: Director's Approval*

Content includes the development of individual competency in sight reading, dynamics, rhythmic interpretation, intonation, and the concepts of ensemble performance.

JAZZ ENSEMBLE (5360Y), Grades 9-12, Full Credit Year Course *Prerequisite: Director's Approval*

A study of the jazz idiom and the techniques related to playing the different styles with an introduction to basic improvisational skills. Content includes development of individual competency in sight reading, dynamics, rhythm interpretation, balance, and intonation.

WIND ENSEMBLE (5370Y), Grades 9-12, Full Credit Year Course *Prerequisite: Director's Approval & audition*

Content includes a continuing development of skills with a focus on performance at the highest possible level.

PERCUSSION ENSEMBLE (5380Y), Grades 9-12, Full Credit Year Course *Prerequisite: Director's Approval & audition*

Content includes the development of skills on drums, xylophone, timpani, bells, and music literature.

CHORUS I (5460Y), Grades 9-12, Full Credit Year Course *Prerequisite: None - Placement by Instructor (no audition required)*

Content includes instruction in music fundamentals, three and four part singing, and correct vocal techniques. Placement will be according to vocal range.

CHORUS II - CONCERT CHOIR (5470Y), Grades 9-12, Full Credit Year Course *Prerequisite: Staff Recommendation (vocal audition required)*

Content includes more difficult part work and public performances.

CHORUS III - ENSEMBLE (5480Y), Grades 9-12, Full Credit Year Course *Prerequisite: Staff Recommendation*

Content includes a more extensive variety of music, both for reading skills and public performance, and a particular emphasis on the development of individual skills. Afternoon and evening practices are required in preparation for performances. Choreography and showmanship are included.

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MUSIC (continued)

ORCHESTRA I (5410Y), Grades 9-12, Full Credit Year Course *Prerequisite: Staff Recommendation*
> Content includes opportunity for string players to develop greater facility in sight reading, bowing and articulation.

ORCHESTRA II (5420Y), Grades 9-12, Full Credit Year Course *Prerequisite: Director's Approval (audition required)*
> Content includes advanced positions, bowings, and interpretations using standard orchestra and string ensemble music. It is intended for students who have reached a high degree of performance proficiency.

BEGINNING MIDI & COMPUTER APPLICATIONS IN MUSIC (5430Y), Grades 10-12, Heritage High Only, Full Credit Year Course *Prerequisite: Some music background required*
> This course is an introduction to computer applications currently being used by composers, performers, and music educators. Topics to be covered include music notation and sequencing software, live MIDI performance techniques, educational software, CD ROM interactive applications, Internet resources, and a history of music technology.

ADVANCED PLACEMENT (AP) MUSIC THEORY (5439Y), Grades 10-12, Full Credit Year Course *Prerequisite: Staff Recommendation based on the ability to read and write musical notation. Also recommended: concurrent enrollment in a music course.*
> This course introduces the student to musicianship, theory, musical materials and procedures. Integrates aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition and, to some extent, history and style. Musicianship skills such as dictation and other listening skills, sight-singing, and keyboard harmony may be taught as a part of the course. **All students are required to take the advanced placement examination in May.**

ART

*Two semesters of **Art I** are prerequisite to most other art courses. Although instructional materials are provided, the student is often required to provide materials for individual projects that he/she retains. In addition, a lab fee is often required to cover the costs of consumable materials. Several advanced placement courses are available in the curriculum.*

ART I (5510Y), Grades 9-12, Full Credit Year Course *Prerequisite: None*
> The first semester of this course is an exploration of a variety of media with the elements of art and the development of basic studio skills as the central focus. The second semester content includes additional media exploration and studio skills development with a central focus on composition through the study of the principles of design.

ART (continued)

DRAWING (5520A, 5520B), Grades 10-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Art I or Staff Recommendation*
> This course is an exploration of drawing media. Content includes the interpretation of the three-dimensional environment to a two-dimensional surface. Realistic, naturalistic, and contemporary drawing is part of the course of study. Subject matter will include still life, figure drawing, perspective studies, and nature.

PAINTING I (5530A), Grades 9-12, 1st Sem., One-half Credit. *Prerequisite: Art I*
> This course is an introduction to the basic techniques in opaque and transparent media, such as acrylics, oils, and watercolor. Brush and media control in both hard edge and blended edge technique will be explored. Students will need to purchase items or pay a fee for consumable materials.

PAINTING II (5540B), Grades 9-12, 2nd Sem., One-half Credit. *Prerequisite: Painting I*
> This course focuses on the study of composition in painting and the exploration of various painting styles. The further advancement of specific painting skills and the use of color will be a large part of the course of study. The development of an individualized direction will be a major focus. Students will need to purchase items or pay a fee for consumable materials.

SCULPTURE I (5550A, 5550B), Grades 10-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Art I or Staff Recommendation*
> Sculpture is an exploration of a variety of three-dimensional media. Techniques will include both traditional and contemporary expression. The concepts of relief and in-the-round, in functional and non-functional directions will be explored.

SCULPTURE II (5551B), Grades 10-12, 2nd Sem. Only. One-half Credit. *Prerequisite: Sculpture 1.*
> This course allows a student to focus on finding a concentration in sculpture in order to develop additional skill with a specific media or subject matter. This course builds on sculpture 1 as students develop pieces to be used in a 3-dimensional portfolio.

DIGITAL PHOTOGRAPHY AND PRINTMAKING (5570Y), Grades 10-12, Full Credit Year Course *Prerequisite: Art I or Recommendation.*
> Course content includes study of traditional printing processes such as relief, monoprinting, lithography, intaglio, and serigraphy with an emphasis on design and composition. Digital photography and computer enhancement techniques will be explored. Comfort with computer technology is recommended.

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ART (continued)

PHOTOGRAPHY (5560Y), Grades 10-12, Full Credit Year Course *Prerequisite: Art I or Senior exemption*

This course is designed so that students explore such fields as Photo Journalism, Computer Graphics, and Fine Art Photography. Composition, lighting and utilizing special effects available in digital cameras are covered. Extensive use of digital photo editing software will be explored. Comfort with computer technology is recommended. Students will need to have a camera available to complete required work.

COMMERCIAL ART (5580A, 5580B), Grades 10-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Art 1 or Recommendation.*

This course covers art as it issued in careers. An exploration of various careers and skills and techniques will be the central focus. Visual design and communication will be explored in various media. Vocabulary, technical skills, and creative direction will be major elements of evaluation. Comfort with computer technology is recommended.

ADVANCED STUDIO ART (5517Y), Grades 11 & 12, Full Credit Year Course *Prerequisite: Two Credits in Art and Staff Recommendation*

This advanced level course expands on the content presented in the introductory course and allows students to explore areas of interest in greater depth.

ADVANCED PLACEMENT (AP) PORTFOLIO ART (5519Y) Grades 11 & 12, Full Credit Year Course *Prerequisite: Two Credits in Art and Staff Recommendation*

This college-level course is structured around the portfolio requirements set by the College Board evaluation program. Students may develop a drawing portfolio (using a variety of 2-D media), a two-dimensional portfolio (using a variety of 2-D media with a design and graphics focus), or a three dimensional portfolio (using a variety of 3-D media). **Students must submit a portfolio.**

ADVANCED PLACEMENT (AP) ART HISTORY (5529Y), Grades 11 & 12, Full Credit Year Course *Prerequisite: Previous experience in advanced placement.*

This course is geared to students with a strong desire to explore, read about, and write about the history of art. All course activities are in preparation for the AP exam. **All students are required to take the advanced placement examination in May.**

DRAMA

Several opportunities are offered for students to develop their knowledge and skills in the dramatic arts, both "behind the scenes" and on stage. An active Drama Club and public performances are important parts of the program. Additional drama courses may be taken through Independent Study.

INTRODUCTION TO THEATRE (5610Y), Grades 9-12, Full Credit Year Course *Prerequisite: None.*

This course is a basic introduction to acting and other theatre skills. Course content includes units in Theatre Games, Improvisation, Stagecraft, Theatre Vocabulary and Terminology, and Theatre History.

MUSICAL THEATRE DANCE (5611Y) Grades 9-12, Full Credit Year Course *Prerequisite: Introduction to Theatre or Staff Recommendation.*

This course focuses on the various styles of dance prevalent in the musical theatre. Students will work in each dance style while learning how it has been used to develop and advance musical theatre. **This course may be taken repeatedly for elective credit.**

ACTING I (5620A, 5620B), Grades 9-12, 1st or 2nd Sem. One-half Credit. *Prerequisite: Introduction to Theatre or Staff Recommendation.*

This course includes the study of specific acting techniques and the practical application of those techniques in graded scene performances in class. The course is intended for students with a serious interest in acting as a career or hobby. **This course may be taken repeatedly for elective credit.**

ACTING II (5630Y), Grades 11 & 12, Full Credit Year Course *Prerequisite: Acting I and Staff Recommendation.*

This course is performance-oriented and includes public performances involving all class members during the year. **This course may be taken repeatedly for elective credit.**

HISTORY OF MUSICAL THEATRE (5621A) Grades 11 & 12, 1st Sem. Only. One-half Credit. *Prerequisite: Acting 1 or Staff Recommendation.*

This course introduces the student to the musical theatre genre including a history of musical theatre, the development of the genre with focus on each major advancement, reading and viewing major musical theatre works, and studying the contributions of important people in the development of the musical theatre.

PLAYWRITING (5622A) Grades 11 & 12, 1st Sem. Only. One-half Credit. *Prerequisite: Acting 1 or Staff Recommendation.*

This course will focus on the analysis of dramatic form and style; examination of plot, character, and thought; and expression through dialogue. It will include the practical application of theory by writing one-page plays and will culminate in the creation of a ten-minute play.

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DRAMA (continued)

DIRECTING (5623B) Grades 11 & 12, 2ⁿᵈ Sem. Only. One-half Credit. *Prerequisite: Acting 1 or Staff Recommendation.*
This course offers students an opportunity to learn the techniques of directing a play. Each student will be required to direct two graded scenes in public performance during the semester.

APPLIED TECHNICAL THEATRE I (5640Y), Grades 9 - 12, Full Credit Year Course *Prerequisite: Introduction to Theatre or Staff Recommendation.*
The course is designed to give students a working knowledge of the many aspects of backstage work. The course includes an overview of theatre history, safety, set construction, scene painting, electrics, sound stage rigging, backstage management and some design. The course includes classroom instruction, supplemental reading assignments, and practical hands-on work.

TECHNICAL THEATRE I DESIGN (5641A, 5641B) Grades 9-12, 1ˢᵗ or 2ⁿᵈ Sem. One-half Credit. *Prerequisite: Introduction to Theatre or Staff Recommendation.*
This course introduces students to the principles of design as they apply to performance and the design process. This is primarily a project-based class in which students will deal with the basic principles of scenic, costume, sound, and lighting design.

TECHNICAL THEATRE I PRODUCTION (5642B) Grades 9-12, 2ⁿᵈ Sem. Only. One-half Credit. *Prerequisite: Introduction to Theatre and Staff Recommendation.*
This course is an introduction to scenic construction, lighting, sound, stage organization, and terminology. Students will study the methods and materials of set construction and the methods of implementing lighting, costumes, props and sound within a production.

APPLIED TECHNICAL THEATRE II (5650Y), Grades 9 - 12, Full Credit Year Course *Prerequisite: Applied Technical Theatre I and Staff Recommendation*
This is an advanced course that will focus on the design elements of the theatre. Students receive instruction in set, lighting and sound design and are required to complete design projects in class and out. The course includes a study of different design techniques, methods of presenting design effectively, and an emphasis on using design as a tool to further express the drama. This course may be taken repeatedly for elective credit.

TECHNICAL THEATRE II (5651Y) Grades 10-12, Full Credit Year Course *Prerequisite: Technical Theatre I Design, Technical Theatre I Production or Staff Recommendation.*
This course will focus on advanced design and implementation of elements in the theatre. As part of this course, students will be involved in the backstage aspects of school productions. **This course may be taken repeatedly for elective credit.**

DRAMA (continued)

COSTUMING (5652B) Grades 11 & 12, 2ⁿᵈ Sem. Only. One-half Credit. *Prerequisite: Technical Theatre 1 Design, Technical Theatre 1 Production, or Staff Recommendation.*
This course introduces the art of design with specific emphasis on its relation to costuming for the theatre. Students will explore the use of various media and techniques used for the creation of costume design. A variety of rendering techniques may be explored including collage, watercolor, and transfer drawing. **This course may be taken repeatedly for elective credit.**

STUDENT INTERN PROGRAMS

ELEMENTARY OR MIDDLE SCHOOL STUDENT INTERN (7130Y), Grades 11 & 12, Full Credit Year Course
Prerequisite: Staff Recommendation
Content includes assignment to an elementary or middle school teacher one period daily. Students may tutor, help with projects, read stories, or perform clerical duties. In addition, middle school student interns may work in lab settings. Seminars are presented by educators in various fields during the semester. This course offers a career exploration opportunity for students considering elementary education or a child related field. ***Students must have their own transportation or be assigned to a school within walking distance.***

GENERAL STUDENT CAREER INTERN (7131Y) Grade 12 ONLY, Full Credit Year Course *Prerequisite: Staff Recommended and Approved application.*
This course is ONLY available to Seniors who want to gain experience in a career field which they are interested in pursuing after high school. Students must submit an application for acceptance in the program to their counselor during the registration process in Grade 11. Students will choose their internship placement from the list of cooperating businesses. Examples of cooperating businesses include Areva, Architectural Partners, Virginia's Region 2000 Local Government Council, Delegate Scott Garrett, Blue Ridge Therapy Associates, Orthopedic Center of Central Virginia, Lynchburg City Schools, and various dental offices. During the first five weeks of the course, students will complete the Workplace Readiness Skills curriculum. Topics include initiative, work ethic, teamwork, confidentiality, independence, communications, problem solving, decision making, computer applications, and employment issues. Students will be required to serve three hours a week in their internship. ***Students will be responsible for their own transportation.***

TEACHER/OFFICE INTERN (7110A, 7110B) Grades 10-12, 1ˢᵗ or 2ⁿᵈ Sem., One-fourth Credit. *Prerequisite: Staff Recommended*
Course includes opportunities to assist a staff member one period daily. **This course is graded as pass or fail. This course may be taken repeatedly for elective credit.**

NEWSPAPER & YEARBOOK

NEWSPAPER (7410Y), Grades 10-12, Full Credit Year Course *Prerequisite: Staff Recommendation*
>Content includes preparation, editing and publication of school newspaper. This course meets daily, just as other credit-bearing courses. **This course may be taken repeatedly for elective credit.**

YEARBOOK (7420Y), Grades 10-12, Full Credit Year Course *Prerequisite: Staff Recommendation*
>Content includes preparation, editing and publication of school yearbook. This course meets daily, just as other credit-bearing courses**. This course may be taken repeatedly for elective credit.**

LEADERSHIP

LEADERSHIP TRAINING (7770A, 7770B), Grades 9-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Student interest and staff recommendation*
>This is a one semester elective credit course that provides opportunities for students to learn about and engage in leadership activities. **This course may be taken repeatedly for elective credit.**

POSITIVE PARENTING PROGRAM

Pregnant high school students may enroll in the Positive Parenting Program (P3) or they may continue to attend their base school. If they elect to participate in the Positive Parenting Program, they will be enrolled in semester elective courses in child development and care, family health and development, or nutrition and food preparation in addition to their regular classes. Transportation is provided for Heritage High School students who participate in this program.   Homebound instruction will be provided for pregnant middle school students and for both middle and high school students immediately following childbirth.

FAMILY HEALTH & SOCIAL DEVELOPMENT (5241A, 5241B), Grades 9 or 10, 1st or 2nd Sem., One-half Credit. *Prerequisite: None*
>**This course fulfills the health and family life education requirement for students in grade ten.** The course includes lessons related to prenatal personal health, substance abuse, dietary choices, self-control, goal setting, family health habits, violence prevention, and community health services. An extended study of caring for infants and toddlers is provided and early childhood nutrition, safety, and preventive health topics are presented.

POSITIVE PARENTING PROGRAM (continued)

CHILD DEVELOPMENT AND CARE (7480Y), Grades 9-12, Full Credit Year Course *Prerequisite: None*
>Students learn the basics of the development of children from birth through toddler age. Expectations for postnatal parental responsibility are presented with an emphasis on building a nurturing relationship between parents and children. The course also focuses on the importance of early childhood education.

NUTRITION AND FOOD PREPARATION (7481Y), Grades 9-12, Full Credit Year Course *Prerequisite: None*
>Students learn the skills necessary to prepare nutritious foods in a safe manner. Students study units on nutrition, cost effective food preparation, safety and sanitation, and other food preparation skills.

ACADEMIC SUPPORT
(These courses can be taken repeatedly for elective credit)

SOL REVIEW FOR ENGLISH: R/L/R 11 (7211A, 7211B), Grade 12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Passed English 11 but failed English: Reading SOL test*
>A one semester elective credit course including a review of the standards covered on the English: Reading/Literature/Research SOL test for 11th grade. This course will focus on the content of the test and on study and testing-taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer-assisted instruction targeting each student's knowledge and skill deficits.

SOL REVIEW FOR ENGLISH: WRITING 11 (7212A), Grade 12, 1st Sem., One-half Credit. *Prerequisite: Passed English 11 but failed English: Writing SOL test*
>A one semester elective credit course including a review of the standards covered on the English: Writing SOL test for 11th grade. This course will focus on the content of the test and on study and testing-taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer-assisted instruction targeting each student's knowledge and skill deficits.

SOL REVIEW FOR MATH (7221A, 7221B), Grades 10-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Passed a math course (Algebra 1, Geometry, or Algebra 2) but failed the associated SOL test*
>A one semester elective credit course including a review of the math standards covered on the appropriate math SOL test. This course will focus on the content of the test and on study and testing-taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer-assisted instruction targeting each student's knowledge and skill deficits.

ACADEMIC SUPPORT
(continued)
(These courses can be taken repeatedly for elective credit)

SOL REVIEW FOR SCIENCE (7231A, 7231B), Grades 10-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Passed a science course (Earth Science or Biology) but failed the associated SOL test*

A one semester elective credit course including a review of the science standards covered on the appropriate science SOL test. This course will focus on the content of the test and on study and testing-taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer-assisted instruction targeting each student's knowledge and skill deficits.

SOL REVIEW FOR SOCIAL STUDIES (7241A, 7241B), Grades 10-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Passed a social studies course (World History and Geography 1, World History and Geography 2, Geography, or U.S. History) but failed the associated SOL test*

A one semester elective credit course including a review of the social studies standards covered on the appropriate social studies SOL test. This course will focus on the content of the test and on study and testing-taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer-assisted instruction targeting each student's knowledge and skill deficits.

SAT PREPARATION (7610A, 7610B), Grades 11 or 12, 1st or 2nd Sem., One-half Credit. *Prerequisite: None*

This is a one semester elective credit course that provides a review of the content of the critical reading, mathematics, and writing components of the Scholastic Aptitude Test (SAT) I.

ENGLISH AS A SECOND LANGUAGE (ESL) SUPPORT (1930A, 1930B), Grades 9-12, 1st or 2nd Sem., One-half Credit. *Prerequisite: Identified ESL students only*

This is a one semester elective credit course that provides additional support to assist students with Limited English Proficiency (LEP) in their acquisition of English language knowledge and skills.

ACCELERATING READING I (1192Y), Grade 9, Full Credit Year Course *Prerequisite: Identified students only*

This is an elective credit course that provides additional strategies and skills for students who are working to improve their vocabulary, reading fluency and comprehension.

ACCELERATING READING II (1130Y), Grades 10-12, Full Credit Year Course *Prerequisite: Identified students only*

This is an elective credit course that provides additional strategies and skills for students who are working to improve their vocabulary, reading fluency and comprehension.

ACADEMIC SUPPORT
(continued)
(These courses can be taken repeatedly for elective credit)

MATH LAB (7222Y), Grades 9-10, Full Credit Year Course
Prerequisite: Identified students only

This course is designed to strengthen essential computational, pre-algebraic, and algebraic skills while the student is concurrently enrolled in Algebra 1. The course is provided using a research-based, computer-assisted instructional program with topics aligned with the content in the core Algebra 1 course. This course awards elective credit.

STUDY HALL (STUDYA, STUDYB), Grades 9-12, 1st or 2nd Sem. No Credit *Prerequisite: Identified students only*
.

COURSES FOR THE APPLIED STUDIES DIPLOMA

The following courses are designed to provide students with identified disabilities the knowledge and skills necessary to qualify for an Applied Studies Diploma.

READING I (1040Y), Grades 9-12, Full Credit Year Course
Prerequisite: None
READING II (1041Y) Grades 9-12, Full Credit Year Course
Prerequisite: Reading I
READING III (1042A, 1042B) Grades 9-12, Full Credit Year Course *Prerequisite: Reading II*

EDUCATION FOR EMPLOYMENT (6030Y), Grades 9-12, Full Credit Year Course *Prerequisite: None*
WORK EXPERIENCE 1 (6040Y), Grades 9-12, Full Credit Year Course *Prerequisite: Education for Employment. This is a double-period course. This same course is available in a single period for one-half credit per semester under course number 6041 A&B.*
WORK EXPERIENCE II (6050Y), Grades 9-12, Full Credit Year Course *Prerequisite: Work Experience I. This is a double-period course. This same course is available in a single period for one-half credit per semester under course number 6051.*
INTERPERSONAL SKILLS (5050Y), Grades 9-12, Full Credit Year Course *Prerequisite: None*
OCCUPATIONAL SKILLS (5051Y), Grades 9-12, Full Credit Year Course *Prerequisite: None*
RECREATION AND LEISURE SKILLS (5052Y), Grades 9-12, Full Credit Year Course *Prerequisite: None*
FUNCTIONAL ACADEMICS (5053Y), Grades 9-12, Full Credit Year Course *Prerequisite: None*
DAILY LIVING SKILLS (5070Y), Grades 9-12, Full Credit Year Course *Prerequisite: None*

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COURSES FOR THE APPLIED STUDIES DIPLOMA
(continued)

The following courses are designed to provide students with identified disabilities the knowledge and skills necessary to qualify for an Applied Studies Diploma.

ADAPTIVE PHYSICAL EDUCATION (5071 A & B), Grades 9-12, 1st or 2nd Sem., One-half Credit Per Sem., *Prerequisite: None*

CAREER BASED JOB TRAINING (5072 A & B), Grade 9-12, 1st or 2nd Sem., One-half Credit Per Sem., *Prerequisite: None*

GENERAL RESOURCE (5040 A & B), Grade 9-12, 1st or 2nd Sem., One-half Credit Per Sem., *Prerequisite: None*
This course can be taken repeatedly for elective credit.

SUPPORT RESOURCE I (5041 A & B), Grades 9-12, 1st or 2nd Sem., One-half Credit Per Sem., *Prerequisite: None*

SUPPORT RESOURCE II (5042 A & B), Grades 9-12, 1st or 2nd Sem., One-half Credit Per Sem., *Prerequisite: None*

SUPPORT RESOURCE III (5043 A & B), Grades 9-12, 1st or 2nd Sem., One-half Credit Per Sem., *Prerequisite: None*

For additional information about these courses or the applied studies diploma options, please contact the counselor or special education teacher at either high school.

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SPECIAL PROGRAM OPPORTUNITIES

AP CAPSTONE

AP Capstone™ is an innovative diploma program from the College Board that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. AP Capstone is built on the foundation of two AP courses — AP Seminar and AP Research — and is designed to complement and enhance the in-depth, discipline-specific study experienced in other AP courses.

In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. In AP Research, students cultivate the skills and discipline necessary to conduct independent research in order to produce and defend a scholarly academic thesis.

Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams will receive the AP Seminar and Research Certificate. AP Seminar may also be taken as a stand-alone option

DUAL ENROLLMENT COURSES

The dual enrollment program with Central Virginia Community College allows students who are enrolled in certain courses in the high schools to receive both high school and college credit. All dual enrollment core content courses and electives are weighted at 5.0 quality points. Dual enrollment courses in career and technical fields are weighted at 4.5 quality points. The College Success Skills course is weighted at 4.0 quality points. Student interest defines which courses will be taught on a yearly basis. Students enrolled in these courses may earn college credit from CVCC by fulfilling course requirements and complete the course with a grade of C or better. **Students must qualify for enrollment for these courses by taking the CVCC placement test or by ACT/SAT qualifying scores a semester prior to enrollment within dual enrollment course for admission approval.**   The costs for required textbooks for dual enrollment courses will remain the responsibility of the school division. There is no tuition charged for dual enrollment classes taught in high schools. For more information, please contact the appropriate counselor at your student's school.

EARLY COLLEGE PROGRAM

The Early College Program is designed for juniors and seniors who have exhibited the dedication to academics necessary to complete a college curriculum while also completing their secondary education requirements. Students accepted into the program will have the opportunity to receive their high school diploma and their Associate of Arts and Science degree in General Studies from Central Virginia Community College in two years. Each year's cohort class will consist of 24 students. Of the 24 students, eight (8) slots will be reserved for the top eight (8) applicants from each high school (16 total). The final eight (8) slots will be filled by the remaining top eight (8) applicants regardless of high school. A selection rubric based on current high school G.P.A., scores on the Virginia Placement Test in mathematics and English, teacher recommendations, attendance history, and the general quality of the application packet will be used to rank all applicants. CVCC officials will assess and rank the applications. Parents/Families will be responsible for tuition fees to CVCC. There is limited financial support to students with financial need. Financial hardship forms are available in the counseling office. Lynchburg City Schools will provide transportation to and from the student's high school to CVCC, the campus on which all classes will be held. The school division will also pay textbook costs. All students will complete the same courses, and all students' daily schedules will be the same. CVCC classes will begin at 8:00 a.m. and conclude by 1:00 p.m. A shuttle bus will return students to their high school campus in time for 7th period and after-school activities. All Early College students are eligible to participate in any extra-curricular sports and activities at their high schools. The Early College Program will follow the CVCC calendar for all Early College courses, including observing the same holidays and academic breaks (fall, winter, and spring). CVCC staff will use the 10-point LCS grading scale.

Junior Year

CVCC Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
English 111-112	1328AS/BS	College Composition	3	3	5.0
History 121-122	4318AS/BS	United States History I-II	3	3	5.0
Math 163	2328AS	Pre-Calculus I	3		5.0
Math 271	2338BS	Applied Calculus I		3	5.0
Biology 101-102	3328BS	General Biology I-II	4	4	5.0
Comm. Studies 100	5858AS	Principles of Public Speaking	3		4.5
Health 110	5248BS	Concepts of Personal and Comm. Health		3	4.5
Student Dev. 100	7770AS	College Success Skills	1		4.0

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EARLY COLLEGE PROGRAM
(continued)

Senior Year

CVCC Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
English 241-242	1228AS/BS	Survey of American Literature I-II	3	3	5.0
Political Science 211-212	4328AS	U. S. Government I-II	3	3	5.0
Inform. Technology 115	8538AS/BS	Intro. to Computer Apps and Concepts	3		4.5
Math 164	2348AS	Pre-Calculus II	3		5.0
Math 240	2428BS	Statistics		3	5.0
Psychology 230	3438AS/BS	Developmental Psychology		3	4.5
Spanish 101-102	1828AS/BS	Beginning Spanish I-II	4	4	4.5

LYNCHBURG REGIONAL GOVERNOR'S STEM ACADEMY

The Lynchburg Regional Governor's STEM Academy, located at Central Virginia Community College in the AREVA Technology Center, focuses on Science, Technology, Engineering and Math, thus the name STEM. This regional program for accepted high school juniors and seniors is supported by Region 2000 Technology Council; Future Focus Foundation; Central Virginia Community College; the Region 2000 Workforce Investment Board; area business partners including AMTI, AREVA, The Babcock and Wilcox Company, Centra Health and Delta Star; and the school divisions of Amherst, Appomattox, Bedford, Campbell and Lynchburg.

The goal of this program is to close the gap between education and industry, thereby furthering the economic vitality of this region. The STEM Academy differs from the Central Virginia Governor's School in that the courses will have a career and technical educational focus. The curriculum will be driven by needs and projected growth of regional industry. Currently, the two identified student pathways offered at the Academy will be Health Care Technologies and Mechatronics—the blending of mechanical and electrical engineering disciplines. Graduates of this program will be workforce-ready to further the economic growth in Region 2000.

Junior Year

CVCC STEM Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
EGR 115-123	6788AX/BX	Intro. to Engineering Design	4		4.5
IND160/EGR 120	6798AX/BX	Principles of Engineering		4	4.5
MTH 157-158	2469AX/BX	Applied College Algebra & Statistics	3	3	5.0
CHM 101-126	3368AX/BX	Applied Chemistry I & II	4	4	5.0
SDV 100	7770AX	College Success Skills	1		4.0

Senior Year

CVCC STEM Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
IND 250	3777AX	Computer Integrated Manufacturing	3		4.5
MEC 140	3737BX	Introduction to Mechatronics		3	4.5
ETR 113-123	3787BX	Digital Electronics		5	4.5
MTH 163-164	2328AX/2348AX	Pre-Calculus I & II	3	3	5.0
OR MTH 173-174	2479AX/BX	College Calculus I & II (for students w/precalculus)	5	5	5.0
PHY 121-122	3569AX/BX	Principles of Physics I & II	4	4	5.0
ETR 121-123	3787BX	Digital Electronics		5	4.5
EGR 190	7720BX	Senior Internship		1	4.0

LYNCHBURG REGIONAL GOVERNOR'S STEM ACADEMY
(continued)

Senior Year Biotechnical Engineering

CVCC STEM Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
BIO 141-142	3579AX/BX	Human Anatomy & Physiology I & II	4	4	5.0
HLT 141	8377AX	Introduction to Medical Terminology	2		4.5
ETR 113-123	3787BX	Digital Electronics		5	4.5
MTH 163-164	2328AX/2348AX	Pre-Calculus I & II	3	3	5.0
OR MTH 173-174	2479AX/BX	College Calculus I & II (for students w/precalculus)	5	5	5.0
EGR 190	7720BX	Senior Internship		1	4.0

OTHER CVCC OPPORTUNITIES

CVCC has created an opportunity for rising seniors who are interested in getting a head start on their career in the fields of RN, EMT, HVAC, Welding, or Machinist.   Seniors will take required high school courses at their base schools and their college courses at CVCC. The courses taken at CVCC will count for both college and high school credit. Transportation will be provided, but tuition costs will be the responsibility of the students and their families. See your school's career or guidance counselor for more information.

Machine Tool

CVCC Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
MAC 161-162	8417AC	Machine Shop Practices I & II	6		4.5
MAC 163-164	8347BC	Machine Shop Practices III & IV		6	4.5
MAC 181	8457AC	Machine Blueprint Reading	3		4.5
SAF 126	8617BC	Principles of Industrial Safety		3	4.5
HLT 110	5248BC	Concepts of Personal & Community Health		2	4.5
SDV 100	7770AC	College Success Skills	1		4.0

Pre-Nursing

CVCC Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
BIO 141-142	3579AC/BC	Anatomy & Physiology I & II	4	4	5.0
ENG 111-112	1328AC/BC	College Composition I & II	3	3	5.0
HLT 230	5227AC	Nutrition & Human Development	3		4.5
PLS 211-212	4328AC/BC	U.S. Government I & II	3	3	5.0
HLT 141	8377AC	Medical Terminology	2		4.5
PSY 230	3438AC/BC	Developmental Psychology		3	4.5
SDV 100	7770AC	College Success Skills	1		4.0
Additional math courses possibly needed for an Advanced Studies Diploma					
MTH 163-164	2328AC/2348BC	Pre-Calculus I & II	3	3	5.0

CVCC TRANSITION PROGRAM

The CVCC Transition Program provides high school students with disabilities the opportunity to acquire skills leading to independent living, employment and self-advocacy. This program is available to high school students identified with disabilities through the Individual Education Plan (IEP). For additional information on this program please contact your student's IEP casemanager.

CENTRAL VIRGINIA GOVERNOR'S SCHOOL (CVGS)

The Lynchburg City Schools' partners with the Central Virginia Governor's School for Science & Technology (www.cvgs.k12.va.us) to provide opportunities beyond the scope of normal high school curricula to gifted students interested in mathematics, science and technology. CVGS students pursue an innovative curriculum, which allows them to cultivate their special talents in mathematics and science through an individual research program, in-depth laboratory experiences and extensive integration of technology into all courses. Instruction is designed to meet the needs of the gifted learner in a challenging independent learning environment that stimulates critical thinking and creative problem solving and emphasizes the development of time management and collaboration skills. CVGS is one of 15 academic year Governor's Schools across the state approved by the Virginia Board of Education and sponsored and evaluated by the Virginia Department of Education.

LCS students, who have a 3.0 unweighted GPA in high school science and mathematics courses, are eligible to apply for admission to the program in February of their sophomore year. Students who do not have an unweighted 3.0 GPA in these courses may apply if they have a PSAT score in math greater than 65 or SAT score in math that is greater than 650. Students must complete an application and must demonstrate an interest in math, science, and technology as well as the ability to work independently. Selection is competitive, and successful applicants from the Lynchburg City Schools must maintain a high GPA in order to remain in the program.

Students from Amherst County, Appomattox County, Bedford County, Campbell County and Lynchburg City Schools attend the Governor's School. Each school division has an identified number of spots for students. The selection of students is based on procedures and policies developed within each school division. Successful applicants from the Lynchburg City Schools have been students who have received high grades in the most rigorous math and science courses available, who have been extremely successful in other academic areas, and who have strong standardized test scores. The average SAT scores for recent Governor's School students are verbal-662, math-658.

The following courses are offered at the Central Virginia Governor's School. In all cases the prerequisite for a course is admission to the Central VA Governor's School. For more information contact your student's counselor or our LCS Coordinator for Gifted Education at 515-5xxx.

CVGS RESEARCH COURSE A & B (3217AG, 3217BG), Grade 11, 1st & 2nd Sem., One-half Credit Per Sem. (5.0 GPA for A).

CVGS PHYSICS A & B (3219AG, 3219BG), Grade 11, 1st & 2nd Sem., One-half Credit Per Sem. (5.0 GPA for A)

CVGS MATH ANALYSIS DUAL ENROLLMENT A & B (2317AG, 2317BG), Grade 11, 1st & 2nd Sem., One-half Credit Per Sem. (5.0 GPA for A)

CVGS SENIOR TECHNOLOGY SEMINAR A & B (3227AG, 3227BG), Grade 12, 1st & 2nd Sem., One-half Credit Per Sem. (5.0 GPA for A)

CVGS COLLEGE COMPUTER SCIENCE, DUAL ENROLLMENT A & B (3729AG, 3729BG) Grade 12, 1st & 2nd Sem., One-half Credit Per Sem. (5.0 GPA for A)

CVGS CALCULUS OF A SINGLE VARIABLE I & II, DUAL ENROLLMENT A & B (2329AG, 2329BG), Grade 12, 1st & 2nd Sem., One-half Credit Per Sem. (5.0 GPA for A)

CVGS CONNECTIONS IN MATHEMATICS A & B (2228AG, 2228BG), Grade 12, 1st & 2nd Sem., One-half Credit Per Sem. (5.0 GPA for A)

CVGS LINEAR ALGEBRA/VECTOR CALCULUS, DUAL ENROLLMENT A & B (2429AG, 2429BG) Grade 12, 1st & 2nd Sem., One-half Credit Per Sem. (5.0 GPA for A)

COLLEGE HUMAN ANATOMY AND PHYSIOLOGY FOR THE HEALTH SCIENCES dual enrollment A & B (3339AG, 3339BG), Grade 12, 1st & 2nd Sem., One-half Credit Per Sem. (5.0 GPA for A)

Please visit the Central Virginia Governor's School website at: http://www.cvgs.k12.va.us/ for course descriptions and any additional information regarding the Central Virginia Governor's School.

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Agenda Report

Date: 01/19/16

Agenda Number: F-3

Attachments: Yes

From: Scott S. Brabrand, Superintendent
Ben W. Copeland, Assistant Superintendent of Operations and Administration

Subject: Capital Improvement Plan: Furniture Replacement

Summary/Description:

The Heritage High School project includes funds set aside for the purchase of new furniture to replace the existing aged furniture in the middle and high schools. The City of Lynchburg Office of Procurement and Purchasing has received bids on the project.

A listing of all bids received are attached for your information. The school administration recommends the bids as noted below:

Arctobel (Items 1-13) – TSRC,dba MEGA Office Furniture	$232,082.33
Bretford (Item 14) – Ball Office Products	$50,344.00
Collins Manufacturing (Items 15-16) – Diversified Educational Systems	$309.56
Fleetwood Group Furniture (Items 17) – Virginia School Equipment	$9,240.00
HON (Items 18-155) – TSRC, dba MEGA Office Furniture	$433,309.28
KI (Items 156-163) – Barrows	$30,170.25
National Office Furniture (Items 164-207) – Barrows	$67,133,18
Virco (Items 209-213) – Barrows	$8,430.80
Wenger (Items 214-230) – Wenger Corporation	$51,809.00
Artcobell (Items 1-8) – TSRC, dba MEGA Office Furniture	$379,828.40

Disposition: ☒ **Action**
☐ **Information**
☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board authorize the school administration to enter into contracts to purchase new furniture for the middle and high schools with those companies as noted in the listing above.

Vendor/Contractor	TSRC, dba MEGA Office Furniture	Virginia School Equipment	Ball Office Products	School Specialty	Barrows	Harris Office Furniture	Wenger Corporation	Delta Graphic	Diversified Educational Systems
PROJECT NAME: FURNITURE FOR LYNCHBURG CITY SCHOOLS									
DESCRIPTION									
ARCTOBELL (ITEMS 1-13)	$232,082.33	No Bid	No Bid	No Bid	No Bid	No Bid	No Bid	No Bid	No Bid
BRETFORD (ITEM 14)	No Bid	$59,002.24	$50,344.00	$63,800.00	$56,246.08	$53,039.84	No Bid	$55,520.50	$76,096.00
COLLINS MANUFACTURING (ITEMS 15-16)	No Bid	No Bid	$427.00	No Bid	No Bid	No Bid	No Bid	No Bid	$309.56
FLEETWOOD GROUP FURNITURE (ITEMS 17)	No Bid	$9,240.00	$9,470.00	No Bid	No Bid	No Bid	No Bid	$10,037.50	No Bid
HON (ITEMS 18-155)	$433,309.28	$525,725.97	$446,161.94	No Bid	No Bid	$464,254.65	No Bid	No Bid	No Bid
KI (ITEMS 156-163)	No Bid	$31,527.20	$33,143.00	No Bid	$30,170.25	$30,803.47	No Bid	No Bid	$38,565.75
NATIONAL OFFICE FURNITURE (ITEMS 164-207)	No Bid	No Bid	No Bid	No Bid	$67,133.18	No Bid	No Bid	No Bid	No Bid
SPACESAVER (ITEM 208)	No Bid	No Bid	No Bid	No Bid	No Bid	No Bid	No Bid	No Bid	No Bid
VIRCO (ITEMS 209-213)	No Bid	No Bid	No Bid	No Bid	$8,430.80	No Bid	No Bid	No Bid	NIo Bid
WENGER (ITEMS 214-230)	No Bid	No Bid	No Bid	No Bid	No Bid	No Bid	$51,809.00	No Bid	$60,340.00
ARTCOBELL (ITEMS 1-8)	$379,828.40	No Bid	No Bid	No Bid	No Bid	No Bid	No Bid	No Bid	No Bid

Agenda Report

Date: 01/19/16

Agenda Number: G-1

Attachments: Yes

From: Scott S. Brabrand, Superintendent
              Ben W. Copeland, Assistant Superintendent for Operations and Administration

Subject: Lynchburg City Schools' Educational Technology Plan: 2015 – 2017 Addendum

Summary/Description:

The 2010-15 Educational Technology Plan for Virginia is the Department of Education's most recently released vision for the use of technology in public schools. It serves as a blueprint for school divisions by identifying the necessary components of an effective technology program.

In accordance with the No Child Left Behind Act, the universal services Act (E-Rate), and the Code of Virginia, school divisions must submit a local technology plan that is aligned with the state plan. The local plan must guide the division's use of educational technology for the next two years. The current Lynchburg City Schools' Educational Technology Plan outlines goals and objectives for years 2013-2015. The document presented this evening has been updated to reflect the state's two-year extension to its Plan. The LCS Plan is in alignment with the revised state Plan until its expiration on June 30, 2017. This timetable will bring the LCS Plan into the same renewal cycle as the Virginia Department of Education's Technology Plan. A draft of the 2015 - 2017 Addendum to the Lynchburg City Schools' Educational Technology Plan: 2013-2015 appears as an attachment to this agenda report.

Disposition: ☐ **Action**
                ☒ **Information**
                ☒ **Action at Meeting on:** 02/02/16

Recommendation:

The superintendent recommends that the school board receive this agenda report as an informational item and consider action at the school board meeting on February 2, 2016.

Educational Technology Plan
2015-2017

A TRADITION OF EXCELLENCE FOR ALL

LCS

LYNCHBURG CITY SCHOOLS

(it)

**Lynchburg City Schools
Information Technology**

http://www.lcsedu.net/techplan

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EXECUTIVE SUMMARY

Lynchburg City Schools, LCS, is an educational community of individuals with diverse learning styles. The LCS vision, a *Tradition of Excellence for All*, encompasses five division-wide indicators of excellence: achievement, behavior, culture, operations and personnel. The Educational Technology Plan for 2016 - 2017 supports the vision, ensuring that technology plays an integral role.

The plan addresses technology needs of instruction, professional development, and operational infrastructure as well as continues an expansion of technology as a vehicle for teaching, learning, and collaboration in the classroom and beyond.

Some of the highlights of the plan that will serve as a foundation for future technology endeavors include: a one-to-one initiative for students, supporting the development of a state-of-the-art high school, extending wireless networks, mounting projectors in all classrooms, and expanding virtual learning communities. The plan also seeks to foster a safe environment through the deployment of phones in all classrooms and a rigorous online Internet safety program.

The Educational Technology Plan consists of five goals:

- Provide a safe, flexible, and effective learning environment for all students.
- Engage students in meaningful curricular content through the purposeful and effective use of technology.
- Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understandings.
- Provide students with access to authentic and appropriate tools to gain knowledge, develop skills, extend capabilities, and create and disseminate artifacts that demonstrate their understandings.
- Use technology to support a culture of data-driven decision making that relies upon data to evaluate and improve teaching and learning.

The Educational Technology Plan for 2016 – 2017 and beyond provides a roadmap that allows LCS to continue to build a strong infrastructure with state-of-the-art equipment, supporting sound instruction that compliments the Lynchburg City Schools' mission, *every child, by name and by need, to graduation*. Technology's influence on the LCS learning community will continue to grow at an unprecedented rate. This plan will harness current and emerging technologies and will use them to motivate the learning process and shape productive citizens in a 21st century global community.

PROCESS

Connecting the LCS Vision and Mission Statements to the Technology Plan

As educators in Lynchburg City Schools, we strive to fulfill our vision of *A Tradition of Excellence for All* and mission *Every child, by name and by need, to graduation* by ensuring that students who leave our schools are ready for life in the digital age. In order to be an educational leader in today's world, our division believes that technology is essential to this vision and mission.

Technology enhances teaching and learning excellence by providing students with a multitude of interactive and multi-sensory educational opportunities and challenges; therefore, it should be integral to all aspects of education from curriculum and instruction to assessment and management.

School Division Vision, Mission and Goal

Vision: A Tradition of Excellence for All

Mission: Every child, by name and by need, to graduation.

Goal: Excellence in Achievement, Behavior, Culture, Operations and Personnel

Technology Vision

Technology is an indispensable part of who we are as a society. *From* *birth, our children are immersed in all forms of technology. Technology has become a requisite part of the teaching and learning paradigm. Our goal is to educate students to look beyond today. By facilitating 21st century skills including collaboration, problem solving and creativity, the school community will utilize technology to enhance instruction, promote life-long thinking, learning and communication skills necessary for success in a 21st century global community.*

The effective use of technology will:
- Facilitate and enhance learning and achievement for all students
- Better meet the needs of all students by providing more opportunities for intervention/remediation or extended learning
- Foster positive attitudes about teaching and learning
- Increase productivity in all aspects of the educational community from communication to more efficiency in management and administrative functions
- Increase student engagement

Technology Mission

Recognizing the importance of technology in today's society, Lynchburg City Schools is committed to providing technology tools and training necessary to ensure excellence in achievement, behavior, culture, operations and personnel.

- We are dedicated to promoting the use of technology as a tool for assisting staff and students in all educational applications and in learning how to utilize technology in more meaningful and efficient ways.
- We are dedicated to developing life-long learners and productive members of society.

Stakeholders

The superintendent approves the composition of a Technology Leadership Team on an annual basis. The responsibility of the committee, which meets monthly, is to review, evaluate, and modify the school division's Educational Technology Plan to ensure its compliance with state and federal directives and with the school division's Comprehensive Plan. The Technology Leadership Team uses the school division's mission and vision as the foundation for all decisions. The membership is composed of representatives from each school in the division including parents, teachers, administrators, technology-data analysis resource teacher, and media specialists. The committee also includes the director of information technology, network administrators, and the coordinator of administration applications. Current members of the team are as follows:

David Childress - Director, Department of Information Technology (Chair)
Doug Wickham - Network Administrator, Department of Information Technology
Jan McKinney - DP Coordinator, Department of Information Technology
Jamie Addesa – Teacher, Dearington Elementary School for Innovation
Janet Bates – Teacher, Bedford Hills Elementary School
Karen Bell - Instructional Technology-Data Analysis Resource Teacher
Henry Bellman – Teacher, Heritage High School
John Blakely - Principal, R. S. Payne Elementary School
William Coleman – Assistant Superintendent for Curriculum and Instruction
Benjamin Copeland – Assistant Superintendent for Operations
Lewis Davis – Teacher, Pride Center
Charles Dellinger – Supervisor for Career Technical Education
Derrick Dews – Teacher, Heritage Elementary School
Thomas Foster – Teacher, Paul Laurence Dunbar Middle School for Innovation
Kristy Genung – Teacher, Linkhorne Elementary School
Scott Goodwin - Network Administrator, Department of Information Technology
Edgar Harris – Teacher, E. C. Glass High School
Aimee Hasinger – Instructional Technology-Data Analysis Resource Teacher
Nancy Hunt - Instructional Technology-Data Analysis Resource Teacher
Frank Hutchinson -Department of Information Technology
Andrew Ickes – Technician, Department of Information Technology
Dana Johnson – Teacher, Sheffield Elementary School
Robert Kerns – Principal, Linkhorne Middle School
Scott Kirkwood – Webmaster, Department of Information Technology
Verna Lamb – Teacher, Sandusky Elementary School
Lisa Lee – Administrative Assistant, Sheffield Elementary School
Letitia Lowery – Teacher, Paul Munro Elementary School
Shannon May - Instructional Technology-Data Analysis Resource Teacher
Rhonda Miller – Teacher, Linkhorne Middle School
Sandra Moorman - Instructional Technology-Data Analysis Resource Teacher
Emily Morris – Teacher, Perrymont Elementary School

Gaynell Phelps, Teacher, Sandusky Middle School
John Proffitt - Instructional Technology-Data Analysis Resource Teacher
Eileen Robinson – Teacher, Bass Elementary School
Rebecca Scott – Teacher, R. S. Payne Elementary School
Dorothy Sova-Stinnett – Teacher, LAUREL Regional School
Janice Suddith – In-District Trainer
Jalie Trowbridge – Teacher, T. C. Miller Elementary School for Innovation
Catherine Tucker – Teacher, Sandusky Elementary School

The Technology Leadership Team also shares proposals regarding policy, strategic planning, and other division-wide initiatives with a variety of other groups for review and input. Among these are the Secondary Leadership Team, the Elementary Leadership Team, the Superintendent's Personnel Advisory Committee, the Superintendent's Parent Advisory Committee, and the Superintendent's Cabinet. The Educational Technology Plan for 2016-2017 was available in draft form to each of these bodies. A copy of the school board-approved version of the plan is available to the general public through the Lynchburg City Schools' web site at www.lcsedu.net.

Summary of the Work of the Planning Committee and Its Benchmarks

Lynchburg City Schools' Educational Technology Plan was constructed through the collaborative effort of multiple professional learning communities which included Senior Information Technology Staff, the Instructional Technology Resource Team, and the LCS Technology Leadership Team.

The Technology Planning Committee began by developing a needs assessment which surveyed all third through twelfth grade students to ascertain how technology is currently being utilized within the division as well as students' access to technology outside of the classroom. The survey consisted of three distinct sections: Internet safety, technology use at school, and technology use outside of school.

The Technology Planning Committee held weekly and monthly sessions to develop the LCS Technology Plan. During this process, the committee reviewed and analyzed the state's Technology Plan along with the existing LCS Educational Technology Plan. Based on the needs analysis, review of the existing Educational Technology Plan, and the new LCS technology vision driven by the implementation of a one-to-one initiative, a new plan was crafted which addresses technology in support of the LCS mission of *Every child, by name and by need, to graduation.*

Summary of the Evaluation Process and the Planned Update Cycle

The Educational Technology Plan for Lynchburg City Schools will be evaluated on an annual basis. This plan is be a living, breathing document which must adapt and change with the needs of the LCS community and emerging technologies. The technology committee will meet once a year to review the

current progress. An annual report will be submitted to the School Board showing the current status and any proposed changes to the Educational Technology Plan.

Conclusions from the Needs Assessment

LCS conducted a needs assessment survey during Spring, 2013 to determine several key factors:

- How technology is used throughout the LCS learning community:
  - If students are being taught 21st century skills
  - If teachers are using available technology resources
- What technology is being used in the classroom and in the students' homes
- The percentage of students who have Internet access at home
- If the current Internet safety program is effective

Results from the Needs Assessment:

1. The LCS Internet safety program has been very successful. We must continue to make students aware of the dangers of the Internet and provide them with the tools to help them successfully navigate the Web.

An adult has discussed Internet safety with me.

LCS — LYNCHBURG CITY SCHOOLS
A TRADITION OF EXCELLENCE FOR ALL

Agenda Report Attachment

I participate in social networking sites (Facebook, Twitter, etc.).

Yes: 66 %
No: 34 %

I have sent inappropriate text messages.

Yes: 19%
No: 81%

I have received inappropriate text messages.
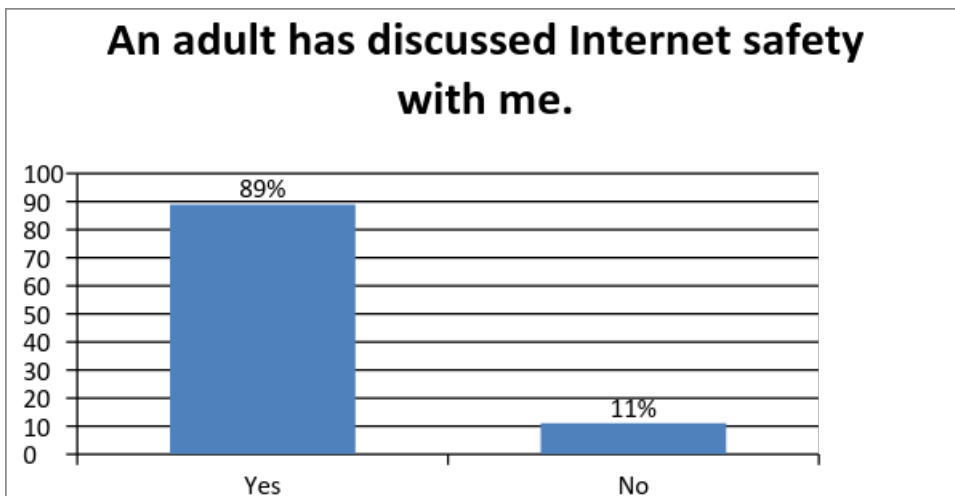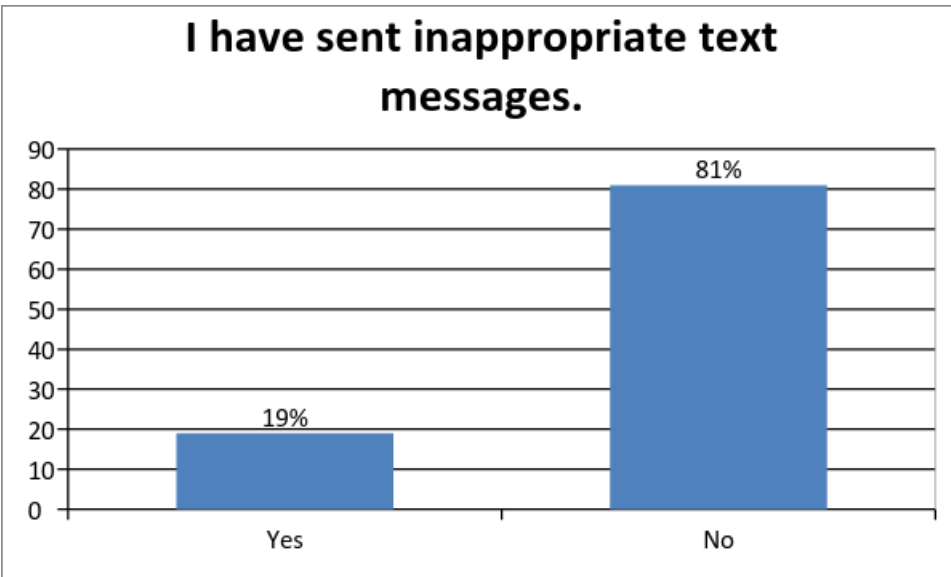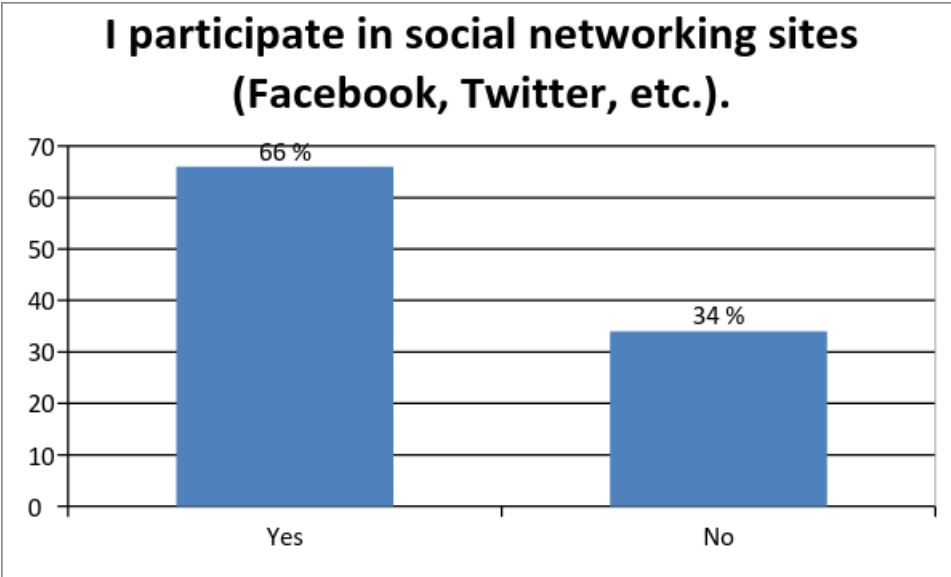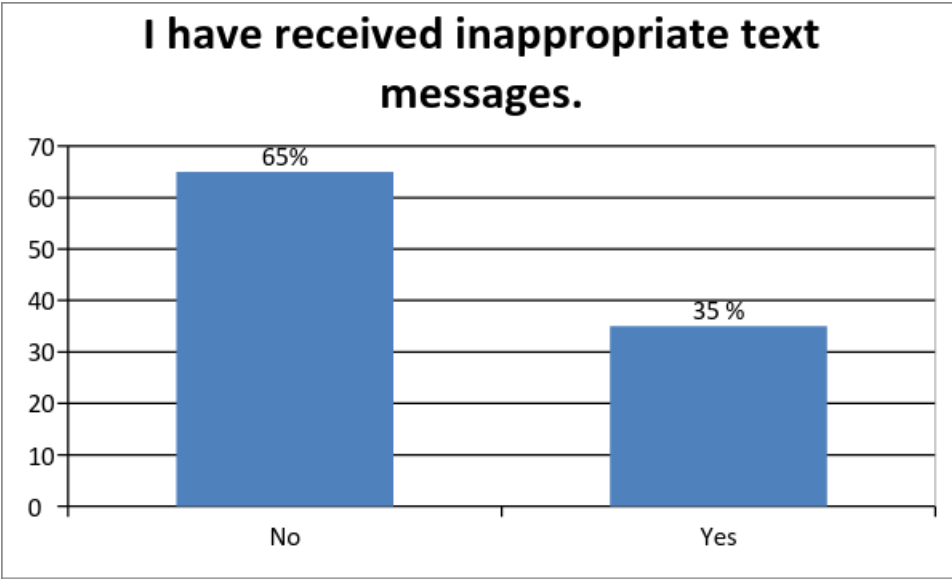
2. Students are not utilizing technology to support their education.

How often do you use technology for classroom assignments at home?

Category	Percentage
Occasionally	40%
Never	25%
Weekly	22%
Daily	13%
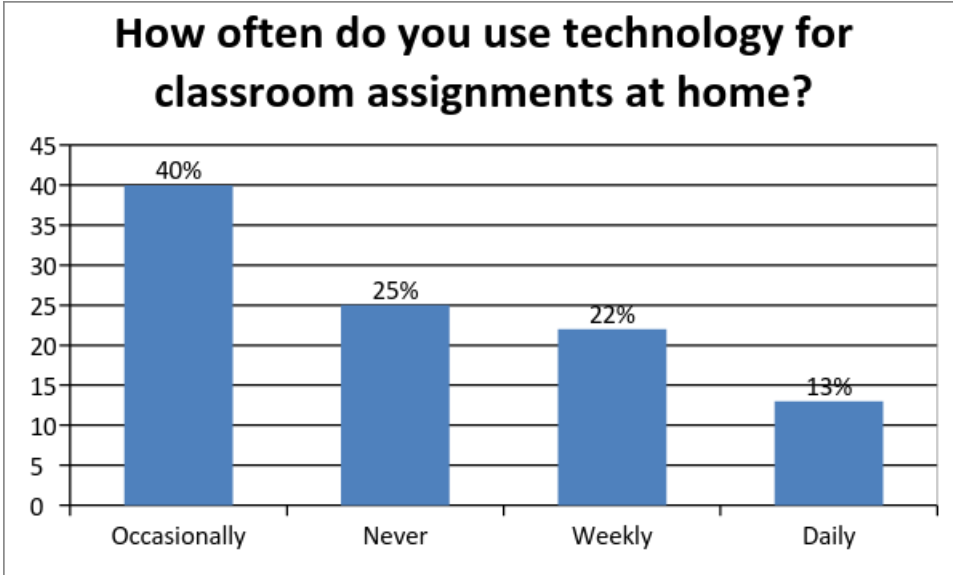
3. More students have access to the Internet at home than was anticipated. Out of 3,100 students only 219 or 7% had no access and only 484 or 15% had dialup.

What type of Internet access do you have at home?

Type	Number
High Speed	2065
SmartPhone	1333
MIFI	908
Dialup	484
None	219
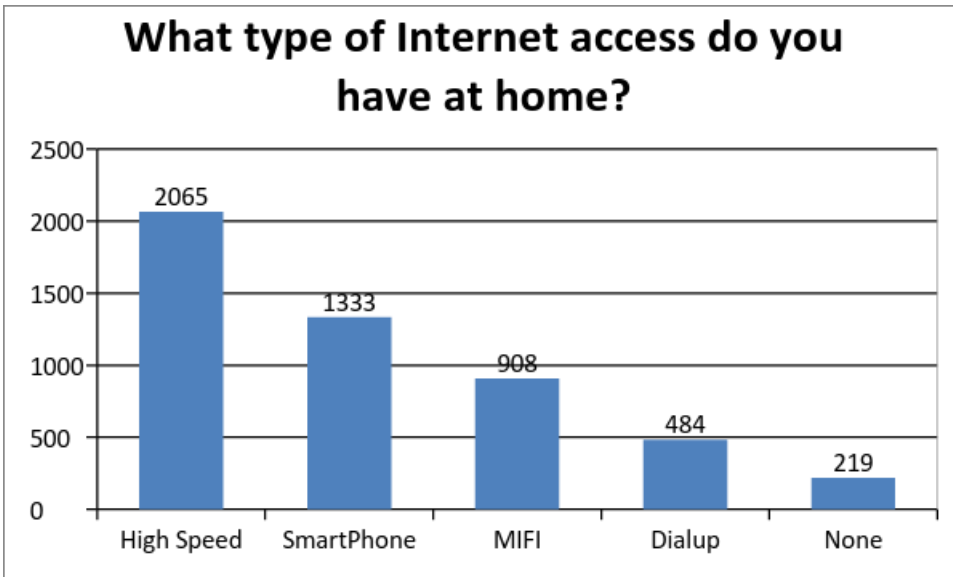
4. Instructional staff must be involved in the decision process regarding instructional technology purchased.
5. Professional development must increase and specifically target the needs of our learning communities.

6. Teachers are not employing all available technology resources available to them.
7. Students are very comfortable using all forms of technology.
8. Funding must be made available to replace aging technologies as well as deploy emerging technologies that engage and promote higher order thinking skills, enabling students to excel in the 21st century.

TARGETS, ACTIONS, AND TIMELINES

The information that follows outlines the strategies in place for implementation of the above areas and associated goals. For each of the key actions, a timeline for implementation is included to indicate a projected chronology to achieve the objectives. Also provided for the key actions is an anticipated budget that would allow for the acquisition and maintenance of the hardware, software, professional development and other services that will be needed to implement the specific strategies in the plan.

The targets and actions contained in this document are essential for the education of our students. The actions below provide concrete examples of how the priorities listed may be met and is not intended to be exclusive or exhaustive. As different technologies emerge, actions will be determined and implemented that correlate with the objectives and goals. Without the necessary resources, these actions cannot be implemented.

The following is a key to the codes used in the remainder of this document.

Targets -	Listings of specific objectives or targets to support the goals and priorities
Actions -	Steps to take that are necessary to reach the target
PIC -	**P**ersons **I**n **C**harge of developing, implementing, reviewing and evaluating the impact of the actions
Codes -	SB – School Board SUPT – Superintendent CO/Admin – Central Office/Administration CO/HR – Central Office/Human Resources CO/IS – Central Office/Instructional Staff CO/SS – Central Office/Support Staff CO/Tech – Central Office/Technology BL/Admin – Building Level/Administration BL/Teac – Building Level/Teachers BL/SS – Building Level/ Support Services ALL – All Administrators
Timeline Codes -	D – Develop E – Evaluate I – Implement M – Maintain R - Review

Technology Plan for 2015 – 2017

Integration - The appropriate use of technology in instruction resulting in improved student learning and achievement and mastery of Virginia's Standards of Learning.

Goal 1-Provide a safe, flexible, and effective learning environment for all students.

Objective 1.1 - Deliver appropriate and challenging curricula through face-to-face, blended, and virtual learning environments.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
1.1.1: Increase awareness of Virtual Virginia and courses available.	BL/Admin	Provide training as needed for faculty and staff, to promote available courses and the requirements needed for students to participate.	RM	EM	RM
1.1.2: Encourage all secondary students to take Virtual Virginia classes.	BL/Admin	Provide students with the most recent courses available.	M	RM	RM
1.1.3: Implement Moodle with WHRO content	CO/IS	Provide professional development for WHRO content	R	DI	RM
	CO/Tech	Provide professional development for Moodle, demonstrating how to use Moodle in a 21st Century Classroom	RM	RM	EM
1.1.4: Gather data with an emphasis on evaluating student learning environments	CO/IS BL/Admin	Utilize technology based data gathering tools (i.e.: Interactive Achievement, Google Forms, Go Formative, Kahoot…etc.)	M	RM	RM
1.1.5: Increase the use of digital curriculum	CO/IS	Increase the use of digital textbooks and other online resources	M	RM	IRM
1.1.6: Expand the current 1:1 device initiative	CO/Tech	Increase the number of devices/classes participating in the 1:1 initiative	EDI	ERIM	ERIM

Technology Plan for 2015 – 2017

Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
1.2.1: Identify potential partnerships that can be utilized to increase access to virtual learning opportunities.	Partners In Ed	Continue to foster and expand current partnerships with local businesses and industries.	EM	IRM	IRM
		Recruit additional businesses to the LCS Partners in Education program to facilitate 21st century learning.	IRM	IRM	IRM
1.2.2: Utilize IT-DARTs and other resources to promote the best practices of integrating technology into teaching and learning.	CO/Tech BL/Admin	Collaborate with classroom teachers concerning instructional needs.	RM	DIR	RM
		Expand professional development offerings.	DIR	DIR	DIR
		Analyze division data to determine how instructional technology assistance could be offered.	DIR	IR	IR
1.2.3: Meet or exceed the Standards of Quality staffing requirements.	SB	Ensure that standards are met and maintained in all categories.	RM	RM	RM
1.2.4: Meet or exceed state standards for infrastructure necessary to participate in online SOL testing	CO/Tech	Evaluate and update switches and routers as needed to ensure a fast and reliable network.	RIM	RIM	RM
		Evaluate and size MAN connections between buildings to accommodate data usage.	RIM	RM	RM
		Implement a virtual solution to allow for SOL testing to occur on Chromebooks	IR	RM	RM
1.2.5: Ensure that instructional staff is included in decisions regarding instructional technology purchases and deployment.	CO/IS CO/Tech	Recruit instructional staff to participate in the evaluation and purchase of new software and hardware.	RM	RM	RM
		Continue to use the LCS One team to guide and establish procedures for implementation of the 1:1 initiative	RM	RM	RM
1.2.6: Collect data from available resources to assess instructional technology needs.	CO/Tech	Incorporate appropriate data into data warehouse.	I	RME	RM

Objective 1.3 - Provide high-quality professional development to help educators create, maintain, and work in a variety of learner-centered environments.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
1.3.1: Utilize IT-DARTs to assist teachers in developing and implementing technology - integrated instruction.	BL/Admin	Model best practices with teachers through thoughtful applications and by seeking to improve learning in classroom instruction.	M	RM	RM
1.3.2: Continue to build and expand the annual Summer Technology Academy.	CO/Tech	Use data provided by teacher surveys to design and implement the annual Summer Technology Academy to target the needs of LCS staff.	RDIE	RDIE	RDIE
1.3.3: Expand offerings of technology-based professional development before, during, and after school.	CO/Tech	Use data provided by teacher surveys to design and implement monthly technology professional development courses to target the needs of LCS staff.	RD	MRDI	MRDI
		Implement virtual staff development offerings.	DIR	DIR	DIR
		Post annual technology development calendar	IRD	IRD	IRD
1.3.4 Offer resources outside the school system to provide professional development in new technologies.	CO/Tech CO/IS	Utilize resources to determine emerging technologies and evaluate available professional development resources.	IRM	IRM	IRM
1.3.5: Offer online libraries of professional development videos.	CO/Tech	Create and expand professional development video library to be shared among teachers in school division.	DI	DIM	DIM
1.3.6: Track participation in professional development	CO/HR CO/Tech	Select and implement professional development tracking system.	DI	EM	EM
1.3.7: Ensure that appropriate staff continues to improve their 21st century technology literacy skills.	BL/Admin CO/Tech	Implement a tiered technology professional development point system that is reflected in evaluations. -Teachers – 4pts -Admin – 2pts -Other staff – 2pts	RM	RM	RM

Objective 1.4 – Provide a safe and engaging learning environment.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
1.4.1: Ensure the safety of students and staff members.	CO/Tech	Implement Voice Over IP phone system in all classrooms.	RM	RM	RM
		Implement a visitor check-in system to screen for sex offenders.	RM	RM	ERM
	CO/Tech	Implement mass notification system over V.O.I.P. phone system	I	RM	RM
	CO/Tech	Update Building Video Security Systems	IRM	IRM	IRM
1.4.2: Increase accessibility and usage of digital video technology.	CO/Tech	Mount all classroom projection units.	IRM	IRM	M
		Evaluate alternatives to current streaming video solutions.	D	DI	M

Goal 2 - Engage students in meaningful curricular content through the purposeful and effective use of technology.

Objective 2.1 - Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
2.1.1: Use Google Apps to promote collaboration via professional learning communities.	CO/Tech	Provide professional development as needed to promote the ongoing use of Google Apps.	IRM	IRM	IRM
2.1.2: Expand online media resources to include content from subject-matter experts.	CO/Tech	Continue to search for the most effective online resources and make teachers aware of them by providing links in an accessible location.	RM	RM	RM

Objective 2.2 – Actualize the ability of technology to individualize learning and provide equitable opportunities to all learners.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
2.2.1: Provide students with opportunities to use appropriate technology to assist in all learning environments.	CO/Tech	Continue to expand 1:1 initiative to other classes/schools	DIR	DIRM	DIRM
	CO/Tech	Increase the number of mobile labs to facilitate equitable use of technology as an instructional/learning tool	DIR	DIRM	RM
	BL/Teac	Engage groups of students through the use of learning management systems	ME	IMR	IM
	BL/Teac	Use 21st century collaborative tools to promote project-based learning	RM	DI	RM
	BL/Admin	Promote Virtual Virginia to individualize learning and to increase success within the virtual learning environment	M	RM	RM
2.2.2: Integrate technology based tools and resources to differentiate classroom instruction.	CO/Tech BL/Admin	Offer staff development on technology-based strategies as a vehicle for differentiated instruction.	RMDI	RMDI	RMDI
2.2.3: Insure teachers have adequate resources to integrate technology into teaching and learning.	SB CO/Tech	Evaluate and procure appropriate resources to promote equitable learning.	RMI	RMI	RMI
2.2.4: Increase administrators' awareness of effective use of instructional technology in the 21st century classroom.	CO/Tech	Present monthly instructional technology demo at principals' meeting.	R	DIR	IRM
	CO/Tech	Encourage building-level administrators to participate in professional development planning.	RM	RM	RM
	CO/Tech BL/Admin	Assist building-level administrators in evaluating effective use of instructional technology in the classroom.	D	IRM	RM

Objective 2.3 - Facilitate the implementation of high-quality Internet safety programs in schools.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
2.3.1: Identify and disseminate best practices and resources to promote the integration of Internet safety programs.	CO/Tech	Maintain portal of Internet safety resources	RM	RM	RM
2.3.2: Integrate Internet and technology safety into all areas of the curriculum	BL/Teac	Implement curricula supporting digital responsibility, awareness, and safety	RM	RM	RM
2.3.3: Monitor the implementation of Internet safety policies and programs and provide technical assistance and support to ensure schools have effective programs and policies.	CO/Tech	Maintain building level records of lessons taught, dates, etc; review with Director of Information Technology annually.	I	RM	RM
2.3.4: Inform users of the AUP (Acceptable Use Policy).	BL/Admin CO/HR	Users will review the AUP annually.	RM	RM	RM

Goal 3 - Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understandings.

Objective 3.1 - Provide and support professional development that increases the capacity of teachers to design and facilitate meaningful learning experiences, thereby encouraging students to create, problem solve, communicate, collaborate, and use real-world skills by applying technology purposefully.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
3.1.1: Provide professional development workshops, tutorials, and courses that support integrating technology into teaching and learning.	CO/Tech	Develop and implement workshops and video tutorials throughout the school year.	RMDI	RMDI	RMDI
		Promote opportunities for off-site technology training through the use of virtual learning resources	RDI	RMDI	RMDI
		Promote professional development calendar	DI	RM	RM
		Continue Summer Technology Academy.	EM	EM	EM
3.1.2: Gather data with an emphasis on evaluating student learning environments	CO/IS BL/Admin	Utilize data warehouse and acquisition tools to assess learning environments.	I	RME	DI
3.1.3: Promote project-based learning	CO/IS CO/Tech BL/Teac	Develop lesson ideas/competitions to promote higher-order thinking and real-world skills through the use of technology	DI	RMDI	RMDI

		Use 21st century collaborative tools to promote project-based learning			
			DI	RMDI	RMDI

Objective 3.2 – Ensure that students, teachers, and administrators are ICT literate.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
3.2.1: Ensure all teachers and administrators are TSIP (Technology Standards for Instructional Personnel) certified.	CO/HR CO/Tech	Monitor state licensure.	RM	RM	RM
		Continue training as needed to achieve certification.	RM	RM	RM
3.2.2: Ensure Virginia state technology competencies are integrated into curriculum alignment.	CO/Tech CO/IS	Review and align technology integration efforts with the revised standards.	IRM	IRM	IRM
	CO/Admin	Review current resource materials and correlate with revised standards.	R	RDI	RM
	CO/Tech	Identify new materials where needed.	R	RDI	RM
	CO/IS	Provide staff development for teachers where appropriate.		DI	DI

Objective 3.3 - Implement technology-based formative assessments that produce further growth in content knowledge and skills development.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
3.3.1: Implement assessment, data management, and reporting system	CO/IS	Develop benchmark and teacher created assessments.	DIRM	DIRM	DIRM
3.3.2: Identify and disseminate information about technology tools and systems to help schools implement assessments that require higher-order thinking	CO/Tech	Utilize IT-DARTs to keep staff current on technology tools and systems that promote Technology Enhanced Item formatted questions.	DIRM	DIRM	DIRM

Technology Plan for 2015 – 2017

Goal 4 - Provide students with access to authentic and appropriate tools to gain knowledge, develop skills, extend capabilities, and create and disseminate artifacts that demonstrate their understandings.

Objective 4.1 - Provide resources and support to ensure that every student has access to a personal computing device.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
4.1.1: Provide students access to age-appropriate individual technology devices	CO/Tech	Increase the number of devices/classes participating in the 1:1 initiative	DIRM	DIRM	DIRM
		Increase the number of mobile labs to facilitate equitable use of technology as an instructional/learning tool	RIM	RIM	RIM
		Make additional technology devices available on a check-out basis	RDI	RIM	RIM
	CO/IS	Provide professional development to instructional staff in order to facilitate the integration of technology into the curriculum	DIRM	DIRM	DIRM
4.1.2: Provide students with age-appropriate interactive content	CO/Tech BL/Teac CO/IS	Evaluate current interactive technologies	RM	RM	RM
	CO/Tech CO/IS	Research emerging interactive instructional technologies	EI	EI	EI
	CO/IS	Provide professional development on application of current interactive technologies	DIRM	DIRM	DIRM

Objective 4.2 - Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
4.2.1: Utilize IT staff and other resources to promote the best practices of integrating technology into teaching and learning.	CO/Tech	Provide face-to-face and virtual assistance to school-based stakeholders.	RIM	RM	RM
		Provide timely and effective technical support to ensure that all tools and the network that supports them are installed and maintained properly.	IMR	MR	RM
4.2.2: Meet or exceed the Standards of Quality staffing requirements.	SB	Provide the appropriate number of instructional and support staff when funding is available.	RM	RIM	RIM
4.2.3: Expand the annual Summer Technology Academy.	CO/Tech	Use data from participant surveys to define and determine upcoming Summer Technology Academies.	RI	RI	RI
4.2.4: Expand offerings of technology-based professional development before, during, and after school.	CO/Tech	Use data from participant surveys to define and determine upcoming professional development before, during, and after school.	RM	RM	RM
4.2.5: Implement SharePoint Foundation	CO/Tech	Provide professional development to reinforce a blended learning environment through the use of SharePoint	DIM	DIM	RM
4.2.6: Implement Moodle	CO/Tech	Develop process to create classes, courses, teacher and student accounts within Moodle framework	IM	ID	IM
		Provide professional development to staff to utilize WHRO content	DI	DIM	RM
		Provide professional development to staff on best practices for Moodle	RM	EM	RM

Objective 4.3 - Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
4.3.1: Provide resources and support for teachers to pursue innovative uses of emerging technologies.	CO/Tech	Provide professional development on emerging technologies for teachers.	RIM	RIM	RIM
4.3.2: Evaluate and promote the use of pedagogically appropriate tools. (ie: round peg – round hole)	CO/IS CO/Tech	Design and implement pilot projects to evaluate a variety of instructional pedagogies and personal computing devices.	DIR	DIRM	DIRM

Goal 5 - Use technology to support a culture of data-driven decision making that relies upon data to evaluate and improve teaching and learning.

Objective 5.1 - Use data to inform and adjust technical, pedagogical, and financial support.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
5.1.1: Implement a comprehensive data warehouse.	CO/Tech	Deploy division-approved data warehouse selection.	I	MRE	IR
5.1.2: Use data to support strategic plans and purchases.	CO/Tech	Provide key decision makers with appropriate data to make informed plans and purchases.	RM	RM	RM

Objective 5.2 - Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
5.2.1 Utilize available personnel to disaggregate, interpret, and use data to plan, improve, and differentiate instruction.	CO/Tech CO/IS	Analyze and disaggregate data.	RM	RM	RM
	BL/Admin	Implement differentiated instruction based on data analysis.	RM	RM	RM
	BL/Admin				
5.2.2 Support teachers in the analysis of data.	CO/Tech	Identify training resources to assist teachers in the analysis of data for instructional purposes.	RM	RM	RM

Objective 5.3 - Promote the use of technology to inform the design and implementation of next generation standardized assessments.

Strategy	PIC	Actions	Timeline		
			2015	2016	2017
5.3.1 Use innovative delivery platforms for students to demonstrate understanding.	CO/Tech	Train instructional staff in use of innovative assessment tools.	DRIM	DRIM	RM
	CO/IS	Promote the use of project based learning applications.	D	I	RM
5.3.2 Replicate technology enhanced item format in benchmark and teacher created assessments.	CO/IS CO/Tech	Replicate VDOE test question formats within division content.	RM	RDM	RM

APPENDICES

Computers at any site will not be replaced on a one-for-one basis. Schools will be provided computers for instructional labs, libraries, and for classroom stations. All equipment that is replaced will either be removed from the site or be used to replace peripheral stations such as those on multi-media carts. In addition, any and all equipment not meeting the current model configuration and standards is also subject to removal. Each building will have uniform equipment and operating systems upon full installation of the plan. Any requests for additional equipment above and beyond the allocation listed in the plan will need to be presented in a proposal to the Department of Information Technology for consideration.

Out of warranty equipment removed from sites and meeting acceptable standards will be reallocated to other buildings with programs in most need of a temporary upgrade and positioned further down the replacement cycle.

Fiscal Analysis

Budget considerations for implementing this plan are represented by the items in the following spreadsheet. This list is by no means exhaustive nor is it a certainty, but serves only to represent what has been determined at the present time to meet the needs for implementing this plan for the future. Implementation is dependent on the current conditions at the time, on the availability of necessary funding resources, and on emerging technologies.

Technology Plan for 2015 – 2017

One-to-One Initiative Long Term Plan

We need technology in every classroom and in every student and teacher's hand because it is the pen and paper of our time and it is the lens through which we experience much of our world. – David Warlick
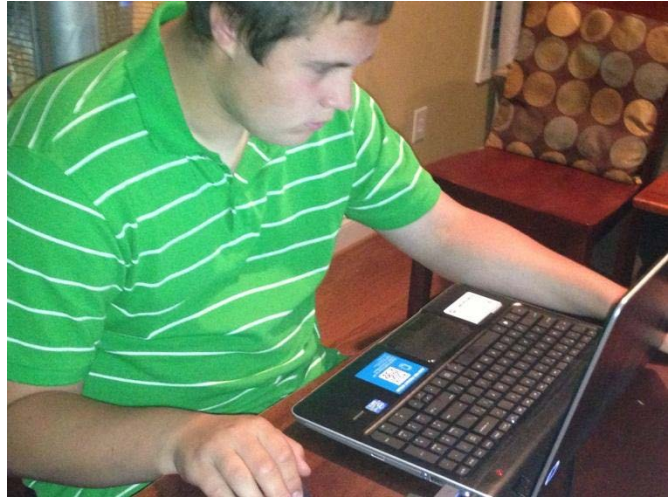
Lynchburg City Schools are breaking free from the industrial age educational model and technology will be a key component. Technology has permeated every aspect of our lives. As educators, we have the obligation to prepare our students for a 21st century global community in which they must be free thinkers, creators, and collaborators where higher order thinking is the norm and technology is the tool. Technology should no longer be viewed as an add-on. Technology must be viewed as the cornerstone in today's classroom if we are truly going to meet the goal of *every child, by name and by need, to graduation.*

	14-15	15-16	16-17	17-18	Total
Power Adapter	$6,630.00	$9,945.00	$16,575.00	$16,575.00	$49,725.00
Lost / Stolen Devices 5% year	$9,414.60	$29,091.11	$39,951.80	$61,725.53	$140,183.04
Two new DARTS.		$65,000.00		$65,000.00	$130,000.00
Three new Techs			$120,000.00	$60,000.00	$180,000.00
Network Engineer		$75,000.00			$75,000.00
Assistant Director				$85,000.00	$85,000.00
9th Grade / HS Math	$425,500.00				$425,500.00
10 Grade - 12th Grade		$394,511.52			$394,511.52
8th Grade			$209,703.98		$209,703.98
6th Grade - 7th Grade				428,078.50	
4th Grade - 5th Grade					**$0.00**
Yearly Sum	$441,544.60	$573,547.63	$386,230.78	$716,379.03	$2,117,702.04
Non Local Funds	**$425,500.00**	**$269,800.00**	**$170,535.55**	**$387,735.02**	**$1,253,570.58**
New Support Staff Funds		$140,000.00	$120,000.00	$210,000.00	$470,000.00
Previous Year			**$96,160.00**		**($192,320.00)**
New Device / Repair Funds	$16,044.60	$163,747.63	**($464.78)**	**$22,484.01**	**$201,811.47**

Total New Funds	0	$303,747.63	**$119,535.22**	**$232,484.01**	**$655,766.87**

PROJECT	FY14-15	FY15-16	FY16-17
Bass Elementary			
Chromebook Cart	$8,000.00		
Replace lab computers with laptop carts			$60,000.000
Laptops for teachers		$5,000.00	$30,000.00
Dearington Elementary			
Site Server	$8,000.00		
Replace lab computers with laptop carts			$60,000.000
Laptops for teachers		$5,000.00	$30,000.00
Payne Elementary			
Site Server	$8,000.00		
Replace lab computers with laptop carts			$60,000.000
Laptops for teachers	$6,000.00	$5,000.00	$35,000.00
Perrymont Elementary			
Site Server	$8,000.00		
Replace lab computers with laptop carts			$60,000.00
Laptops for teachers	$5,000.00	$5,000.00	$30,000.00
Bedford Hills Elementary			
Site Server	$8,000.00		
Replace lab computers with laptop carts			$60,000.000
Laptops for teachers		$5,000.00	$32,000.00
Heritage Elementary			
Site Server	$8,000.00		
Replace lab computers with laptop carts			$60,000.000
Laptops for teachers			$32,000.00
Linkhorne Elementary			
Infrastructure wiring upgrades and maintenance		$24,000.00	
Replace lab computers with laptop carts			$60,000.000
Site Server			$8,000.00
Laptops for teachers			$32,000.00
Paul Munro Elementary			
Infrastructure wiring upgrades and maintenance		$25,000.00	
Replace lab computers with laptop carts			$60,000.000
Site Server			$8,000.00
Laptops for teachers			$32,000.00

Sandusky Elementary			
Infrastructure wiring upgrades and maintenance		$25,000.00	
Replace lab computers with laptop carts	$10,000.00		$60,000.000
Site Server			$8,000.00
Laptops for teachers			$32,000.00
Sheffield Elementary			
Replace lab computers with laptop carts	$25,000.00		$60,000.000
Replace teacher computers		$5,000.00	$32,000.00
Site Server			$8,000.00
T.C. Miller Elementary			
Site Server			$8,000.00
Replace lab computers with laptop carts	$25,000.00		
Laptops for teachers		$2,000	$27,000.00

PROJECT	FY14-15	FY15-16	FY16-17
Dunbar Middle			
Update wireless network to prepare for 1:1		$75,000.00	
Replace lab computers	$25,000.00		
Site Server			$8,000.00
Laptops for teachers		$10,000.00	$73,000.00
Linkhorne Middle			
Update wireless network to prepare for 1:1		$75,000.00	
Replace lab computers	$25,000.00		
Site Server			$8,000.00
Laptops for teachers			$73,000.00
Sandusky Middle			
Update wireless network to prepare for 1:1		$75,000.00	
Replace lab computers	$25,000.000		
Site Server			$8,000.00
Laptops for teachers		$10,000.00	$73,000.00
E.C. Glass High			
Update wireless network to prepare for 1:1	$100,000.00		
Replace lab computers			
Site Server			$8,000.00
Laptops for teachers		$10,000.00	$110,000.00
Heritage High			
Update wireless network to prepare for 1:1	$75,000.00		
Replace lab computers			
Site Server			$8,000.00
Laptops for teachers		$10.000	$110,000.00
Fort Hill Alternative			
Infrastructure wiring for wireless network	$10,000.00		
Add Chromebooks	$80,000.00		
Laptops for teachers			$15,000.00
Division Wide			
Purchased Services	$200,000.00	$200,000.00	$200,000.00
Lease and Rental	$33,000.00	$33,000.00	$33,000.00
Travel	$13,000.00	$12,000.00	$12,000.00
Instructional Materials and Supplies - Subscriptions	$183,000.00	$183,000.00	$183,000.00
VPSA Match	$100,000.00	$100,000.00	$100,000.00

Total	$980,000.00	$889,010.00	$2,006,000.00

Technology Leadership Team Meeting Dates

8/30/12
9/27/12
10/25/12
11/29/12
1/22/13
1/31/13
2/28/13
3/1/13
3/28/13
3/29/13
4/16/13
4/25/13
5/14/13

Lynchburg City Schools' Technology Policies

Password Policy for the Lynchburg City Schools

A computer system and its data are only as secure as the password of the users who access it, particularly users with administrator level permissions. For this reason, good password security is a concern. The following is the password policy that will be enforced for employees of the Lynchburg City Schools.

The Department of Information Technology is working to implement and maintain a strong security plan for our entire computer network. The chart below lists basic system password policy settings and the defaults for the Lynchburg City Schools, followed by an explanation of each.

Enforce password history	6 passwords remembered
Maximum password age	90 days
Minimum password age	7 days
Password length	6 – 12 characters
Passwords must meet complexity requirements	Enabled

Enforce password history
This setting governs how many different passwords must be used before the user can reuse one of them. For example, if this is set to "three passwords remembered," users who have three or more children will always have guessable passwords. The Lynchburg City Schools' setting is a year's worth of passwords with the exact amount dependent on the maximum password age setting below.

Maximum password age
This setting controls how long a password is good before a user is forced to pick a new one. Depending on the minimum password age setting (below), users can choose to change it sooner, but this is the longest it will be allowed. The Lynchburg City Schools' setting is 90 days or roughly two times during the school year.

Minimum password age
This setting controls how long a new password must be used before it can be changed. This setting really works hand-in-hand with the maximum password age above. Without a minimum number of set days, a user could keep changing a password several times in a row, and then return to the original password (effectively NOT changing the password at all). The Lynchburg City Schools' setting is seven days.

Minimum password length
This setting controls how many characters must make up the password. A short password is easier to observe when being entered by a user, so this setting is more important in more public environments like a classroom. A setting of 0 characters means that no password is required at all (simply entering in the user name and pressing return will log in successfully). The Lynchburg City Schools' setting is six characters.

Passwords must meet complexity requirements
Adopting a strong password policy is one of the most effective ways to ensure system security. The following bulleted list is a summary of the Lynchburg City Schools' password complexity requirements:

- User passwords must contain characters from at least three of the following four classes:

Description	Examples
1. English Upper Case Letters	A, B, C, … Z
2. English Lower Case Letters	a, b, c, … z
3. Westernized Arabic Numerals	0, 1, 2, … 9
4. Non-alphanumeric (—special characters‖)	For example, punctuation, symbols. ({}[],.();:'"?/|\`~!@#$%^&*()_-+=)

- At a minimum a password must be at least six characters long. For stronger security, users may create longer passwords with characters from all four classes

- Complex passwords must not be made up of the username, user login, or any part of the user's full name.

- Passwords must be changed every 90 days.

- New passwords cannot be the same as any of your last six passwords.

- Passwords should not be a "common" word (for example, it should not be a word in the dictionary or slang in common use). User passwords should not contain words from any language, because numerous password-cracking programs exist that can run through millions of possible word combinations in seconds.

- A complex password that cannot be broken is useless if it cannot be remembered. For effective security, choose a password that is complex, yet can be remembered. For example, Msi5!YOld (My son is five years old) or IhliVf5#yN (I have lived in Virginia for 5 years now).

*Excerpt from the Lynchburg City Schools'
School Board Policy Manual*

Acceptable Computer System Use - Policy IIBEA

The School Board provides a computer system, including the internet, to promote educational excellence by facilitating resource sharing, innovation and communication. The term computer system includes, but is not limited to, hardware, software, data, communication lines and devices, terminals, printers, CD-ROM devices, tape or flash drives, servers, mainframe and personal computers, tablets, cellular phones, smart telephones, the internet and other internal or external networks.

All use of the Division's computer system must be (1) in support of education and/or research, or (2) for legitimate school business. Use of the computer system is a privilege, not a right. Any communication or material generated using the computer system, including electronic mail, instant or text messages, tweets, or other files deleted from a user's account, may be monitored, read, and/or archived by school officials.

The Division Superintendent shall establish administrative procedures, for the School Board's approval, containing the appropriate uses, ethics and protocol for the computer system.

The procedures shall include:

1) a prohibition against use by Division employees and students of the division's computer equipment and communications services for sending, receiving, viewing or downloading illegal material via the internet;

2) provisions, including the selection and operation of a technology protection measure for the division's computers having Internet access to filter or block Internet access through such computers, that seek to prevent access to:

a) child pornography as set out in Va. Code § 18.2-374.1:1 or as defined in 18 U.S.C. § 2256;

b) obscenity as defined by Va. Code § 18.2-372 or 18 U.S.C. § 1460; and

c) material that the school division deems to be harmful to juveniles as defined in Va. Code § 18.2-390, material that is harmful to minors as defined in 47 U.S.C. § 254(h)(7)(G), and material that is otherwise inappropriate for minors;

3) provisions establishing that the technology protection measure is enforced during any use of the Division's computers;

4) provisions establishing that all usage of the computer system may be monitored;

5) provisions designed to educate students and employees about appropriate online behavior, including interacting with students and other individuals on social networking websites, blogs, in chat rooms, and cyberbullying awareness and response;

6) provisions designed to prevent unauthorized online access by minors, including "hacking" and other unlawful online activities.;

7) provisions prohibiting the unauthorized disclosure, use, and dissemination of photographs and/or personal information of or regarding minors; and

8) a component of internet safety for students that is integrated in the Division's instructional program.

Use of the School Division's computer system shall be consistent with the educational or instructional mission or administrative function of the Division as well as the varied instructional needs, learning styles, abilities and developmental levels of students.

The Division's computer system is not a public forum.

Each teacher, administrator, student and parent/guardian of each student shall sign the Acceptable Computer System Use Agreement, GAB-E1/IIBEA-E2, before using the Division's computer system. The failure of any student, teacher or administrator to follow the terms of the Agreement, this policy or accompanying regulation may result in loss of computer system privileges, disciplinary action, and/or appropriate legal action.

The School Board is not responsible for any information that may be lost, damaged or unavailable when using the computer system or for any information retrieved via the Internet. Furthermore, the School Board will not be responsible for any unauthorized charges or fees resulting from access to the computer system.

The School Board will review, amend if necessary, and approve this policy every two years.

Adopted: August 5, 2014

Legal Refs.:   18 U.S.C. §§ 1460, 2256.

47 U.S.C. § 254.

Code of Virginia, 1950, as amended, §§ 18.2-372, 18.2-374.1:1, 18.2-390, 22.1-70.2, and 22.1-78.

Cross Ref.:   GCPD Professional Staff Discipline

JFC Student Conduct

JFC-R Standards of Student Conduct

Acceptable Computer System Use - Policy IIBEA-R

All use of the Lynchburg City School Division's computer system shall be consistent with the School Board's goal of promoting educational excellence by facilitating resource sharing, innovation and communication. The term computer system includes, but is not limited to, hardware, software, data, communication lines and devices, terminals, printers, CD-ROM devices, tape or flash drives, servers, mainframe and personal computers, tablets, cellular phones, smart phones, the internet and any other internal or external network.

Computer System Use-Terms and Conditions:

1. **Acceptable Use**. Access to the Division's computer system shall be (1) for the purposes

of education or research and be consistent with the educational objectives of the Division

or (2) for legitimate school business.

2. **Privilege**. The use of the Division's computer system is a privilege, not a right.

3. **Unacceptable Us**e. Each user is responsible for his or her actions on the computer system. Prohibited conduct includes but is not limited to:

- using the network for any illegal or unauthorized activity, including violation of copyright or contracts, or transmitting any material in violation of any federal, state, or local law.
- sending, receiving, viewing or downloading illegal material via the computer system.
- unauthorized downloading of software.
- using the computer system for private financial or commercial purposes.
- wastefully using resources, such as file space.
- gaining unauthorized access to resources or entities.
- posting material created by another without his or her consent.
- submitting, posting, publishing, or displaying any obscene, profane, threatening,
- illegal, or other inappropriate material.
- using the computer system while access privileges are suspended or revoked.
- vandalizing the computer system, including destroying data by creating or spreading viruses or by other means.
- intimidating, harassing, bullying, or coercing others.
- threatening illegal or immoral acts.

4. **Network Etiquette**. Each user is expected to abide by generally accepted rules of

etiquette, including the following:

- be polite.
- users shall not forge, intercept or interfere with electronic mail messages.
- use appropriate language. The use of obscene, lewd, profane, lascivious, threatening or disrespectful language is prohibited.
- users shall not post personal information other than directory information as defined in Policy JO Student Records about themselves or others.
- users shall respect the computer system's resource limits.
- users shall not post chain letters or download large files.
- users shall not use the computer system to disrupt others.

- users shall not modify or delete data owned by others.

5. **Liability**. The School Board makes no warranties for the computer system it provides. The School Board shall not be responsible for any damages to the user from use of the computer system, including loss of data, non-delivery or missed delivery of information, or service interruptions. The School Division denies any responsibility for the accuracy or quality of information obtained through the computer system. The user agrees to indemnify the School Board for any losses, costs, or damages incurred by the School Board relating to or arising out of any violation of these procedures.

6. **Security**. Computer system security is a high priority for the school division. If any user identifies a security problem, the user shall notify the building principal or system administrator immediately. All users shall keep their passwords confidential and shall follow computer virus protection procedures.

7. **Vandalism**. Intentional destruction of or interference with any part of the computer system through creating or downloading computer viruses or by any other means is prohibited.

8. **Charges**. The School Division assumes no responsibility for any unauthorized charges or fees as a result of using the computer system, including telephone, data, or long-distance charges.

9. **Electronic Mail**. The School Division's electronic mail system is owned and controlled by the School Division. The School Division may provide electronic mail to aid students and staff in fulfilling their duties and as an education tool. Electronic mail is not private. Students' electronic mail will be monitored. The electronic mail of staff may be monitored and accessed by the School Division. All electronic mail may be archived. Unauthorized access to an electronic mail account by any student or employee is prohibited. Users may be held responsible and personally liable for the content of any electronic message they create or that is created under their account or password. Downloading any file attached to an electronic message is prohibited unless the user is certain of that message's authenticity and the nature of the file.

10. **Enforcement**. Software will be installed on the division's computers having Internet access to filter or block internet access through such computers to child pornography and obscenity. The online activities of users may also be monitored manually. **Any violation of these regulations shall result in loss of computer system privileges and may also result in appropriate disciplinary action, as determined by School Board policy, or legal action.**

Adopted: August 5, 2014

Legal Refs.:   18 U.S.C. §§ 1460, 2256.

   47 U.S.C. § 254.

   Code of Virginia, 1950, as amended, §§ 18.2-372, 18.2-374.1:1, 18.2-390, 22.1-70.2 and 22.1-78.

   Guidelines and Resources for Internet Safety in Schools, Virginia Department of Education (Second Edition October 2007)

Cross Ref.:   GCPD Professional Staff Discipline

   JFC Student Conduct

http://www.cybercrime.gov/rules/kidinternet.htm

JFC-R Standards of Student Conduct

Acceptable Computer System Use Agreement - Policy IIBEA-E2/GAB-E1

Each employee must sign this Agreement as a condition for using the School Division's computer system. Each student and his or her parent/guardian must sign this Agreement before being permitted to use the School Division's computer system. Read this Agreement carefully before signing.

Prior to signing this Agreement, read Policy GAB/IIBEA and Regulation GAB-R/IIBEA-R, Acceptable Computer System Use. If you have any questions about this policy or regulation, contact your supervisor or your student's principal.

I understand and agree to abide by the School Division's Acceptable Computer System Use Policy and Regulation. I understand that the School Division may access, monitor, and archive my use of the computer system, including my use of the internet, e-mail and downloaded material, without prior notice to me. I further understand that should I violate the Acceptable Use Policy or Regulation, my computer system privileges may be revoked and disciplinary action and/or legal action may be taken against me.

Student/Employee Signature _____ Date_____

I have read this Agreement and Policy GAB/IIBEA and Regulation GAB-R/IIBEA-R. I understand that access to the computer system is intended for educational purposes and the Lynchburg City School Division has taken precautions to eliminate inappropriate material. I also recognize, however, that it is impossible for the School Division to restrict access to all inappropriate material and I will not hold the School Division responsible for information acquired on the computer system. I have discussed the terms of this agreement, policy, and regulation with my student.

I grant permission for my student to use the computer system in accordance with Lynchburg City School Division's policies and regulations and for the School Division to issue an account for my student.

Parent/Guardian Signature_____ Date_____

Parent/Guardian Name _____

(Please Print)

P4-21 Surplus property; sale, exchange or lease of real and personal property.

A.   Generally

The sale of school property must be for the benefit of the school division and consistent with good business principles. The school board does have the power to make a gift of school property.

B.   Personal (movable) Property

The superintendent shall be authorized by the board to sell or exchange personal property not exceeding $1,000.00 per item in value. The superintendent shall make every effort to ensure receiving the best possible price.

Surplus vehicles may be sold:
1.   at public auction,
2.   by a licensed public surplus vendor, or
3.   through Internet sales on eBay or other licensed online services.

C.   Real (immovable) Property

The sale or exchange of real property shall be in accordance with state law.

D.   Lease

The leasing of real and personal property shall be in accordance with state law. Legal Reference:

Code of Va., § 22.1-129. Surplus property; sale, exchange or lease of real and personal property. —A. Whenever a school board determines that it has no use for some of its real property, the school board may sell such property and may retain all or a portion of the proceeds of such sale upon approval of the local governing body and after the school board has held a public hearing on such sale and retention of proceeds, or may convey the title to such real property to the county or city or town comprising the school division or, if the school division is composed of more than one county or city, to the county or city in which the property is located. To convey the title, the school board shall adopt a resolution that such real property is surplus and shall record such resolution along with the deed to the property with the clerk of the circuit court for the county or city where such property is located. Upon the recording of the resolution and the deed, the title shall vest in the appropriate county, city or town.

If a school board sells surplus real property, a capital improvement fund shall be established by such school board and the proceeds of such sale retained by the school board shall accrue to such capital improvement fund. The capital improvement fund shall only be used for new school construction, school renovation, and major school maintenance projects.

B. A school board shall have the power to exchange real and personal property, to lease real and personal property either as lessor or lessee, to grant easements on real property, to convey real property in trust to secure loans, to convey real property to adjust the boundaries of the property and to sell personal property in such manner and upon such terms as it deems proper. As lessee of real property, a school board shall have the power to expend funds for capital repairs and improvements on such property, if the lease is for a term equal to or longer than the useful life of such repairs or improvements.

C. Notwithstanding the provisions of subsections A and B, a school board shall have the power to sell career and technical education projects and associated land pursuant to § 22.1- 234.

Notwithstanding the provisions of subsections A and B, a school board of the City of Virginia Beach shall have the

power to sell property to the Virginia Department of Transportation or the Commonwealth Transportation Commissioner when the Commissioner has determined that (i) such conveyance is necessary and (ii) when eminent domain has been authorized for the construction, reconstruction, alteration, maintenance, and repair of the public highways of the Commonwealth, and for all other purposes incidental thereto, including, but not limited to, the relocation of public utilities as may be required.

D. School boards may donate obsolete educational technology hardware and software that is being replaced pursuant to subdivision B 4 of § 22.1-199.1. Any such donations shall be offered to other school divisions, to students, as provided in Board of Education guidelines, and to preschool programs in the Commonwealth.‖

(Code 1950, § 22-161; 1968, c. 261; 1973, c. 220; 1980, c. 559; 1989, c. 102; 1991, c. 298; 1995, c. 513; 1997, c. 686; 2000, c. 93; 2001, c. 483; 2005, c. 446; 2007, c. 813.)

Adopted by School Board: January 6, 1981 Revised by School Board: September 3, 1985 Revised by School Board: September 18, 2007

Lynchburg City Schools' Internet Safety Instructional Program

LCS Internet Safety

The goal of the K-5 Internet Safety Curriculum is to provide safety awareness for children and empower them with knowledge to make safer choices using the Internet. Key points to foster:

- Help children to understand that people they "meet" on the Internet may not be who they claim to be
- Encourage children to discuss what they encounter on the Internet with a trusted adult
- Promote understanding of the dangers of the Internet and skills to avoid them

This program is designed to provide a lesson for each grade-level K-5. There are animated videos, interactive Notebook lessons which could be used with a SmartBoard or shown on a large screen. Activities include material from NetSmartz which is an interactive, educational safety resource from the National Center for Missing and Exploited Children (NCMEC) that creates age-appropriate activities to help teach children how to be safer while online. Another source of interactive lessons comes from Media Awareness Network. We use their "Cyberpig's Adventures" to help illustrate the dangers of online predators and online bullying in age-appropriate lessons.

The following detailed instructions are provided to assist the ITS or the teacher presenting each lesson. It was created in Notebook software, version 9.7.

Internet Safety Kindergarten

1) Open folder called 0_K and 1st Grade

2) Open Notebook file called "K Internet Safety Lesson.notebook"

3) Click on Link for "Important Rules for using computers"
   a. Discuss these 2 rules of the lab
   b. Click the back button to return to main menu

4) Discuss what is meant by "Personal Information"
   a. Click on Link called "What is Personal Information"
   b. Click the frog – each word that comes out is considered personal information (there are 10 words)
   c. Click the back button to return to main menu

5) Click on Link "Introduction to Internet Safety – Clicky's Be Safe online" **
   a. Click on Clicky's picture to start presentation (See Troubleshooting tips if you get any errors here)
   b. Go through interactive presentation the same way we did last year
   c. Click the back button to return to main menu

6) Time – permitting – Go to Game Links page

7) Click the Back button to return to the menu after games

8) Always say "NO" when asked if you want to save the Notebook file

** The presenter's guide for the dialogue between you and Clicky is also located in this

0_K and 1st Grade folder **

Internet Safety 1st Grade

1) Open folder called 0_K and 1st Grade

2) Open Notebook file called "1st Grade Internet Safety Lesson.Notebook"

3) Click on Link for "Important Rules for using computers"
   a. Discuss these 2 rules of the lab
   b. Click the back button to return to main menu

4) Click on Link "Clicky's Presentation & the Webville Outlaws"
   a. Click on Clicky's picture to start presentation (see troubleshooting guide if any error here)
   b. Go through interactive presentation the same way we did last year
   c. After the presentation ends, click "X" to get out of the program and back to Notebook, then click the back button to return to the main menu
5) Click the link "Outlaw Challenge" & play game

6) Time – permitting – Go to Game Links page

7) Click the Back button to return to the menu after games

8) Always say "NO" when asked if you want to save the Notebook file

** The presenter's guide for the dialogue between you and Clicky is also located in this 0_K and 1st Grade folder *

Internet Safety 2nd Grade

1) Open folder called 2nd Grade

2) Open Notebook file called "2nd Grade Internet Safety Lesson.Notebook"

3) Click on Link "Review Internet Safety Rules from K-1 Netsmartz"
    a. Review the 4 Webville Outlaws and Internet Safety Pledge (links to pdf file)
    b. Close the pdf file to return to main menu

4) Click on Link "Nettie and Webster's Internet Safety Lesson" **
    a. Click on picture of Nettie and Webster to start presentation (see troubleshooting guide if any errors here)
    b. Go through interactive presentation the same way we did last year
    c. After the presentation ends, click "X" to get out of the program and back to Notebook, then click the back button to return to the main menu

5) Time – permitting – Go to Game Links page

6) Click the Back button to return to the menu after games

7) Always say "NO" when asked if you want to save the Notebook file

** The presenter's guide for the dialogue between you and Nettie and Webster is also located in this 2nd Grade folder **

Internet Safety 3rd Grade

1) Open folder called 3rd Grade

2) Open Notebook file called "3rd Grade Internet Safety Lesson.Notebook"

3) Click the Link "Communication On-line
   a. Go through PowerPoint presentation (condensed version - from last year)
   b. Discuss terms presented here such as **Internet, World Wide Web, E-mail, Chatrooms, Blogs**
   c. Discuss dangers of talking to strangers
   d. Close the Powerpoint window– this takes you back to Notebook (Menu page)

4) Click on Link "Are you Netwise?"
   a. Go through each abbreviation by pulling down the screen shade – scroll down & when you get to UYN – ask what they think it might mean
   b. Click the NEXT button
   c. Ask if they remember Nettie and Webster from the 1st grade presentation
   d. Click the NEXT button again
   e. Click the Link to UYN Netsmartz video "A Lesson in Personal Safety"
   f. When the movie finishes and you close the windows media player window, it will take you right back to the Notebook page where you left off
   g. Click the Next button
   h. The next two pages are questions to ask students (when you click the correct answer it will spin)
   i. Click the BACK button to return to the menu

5) Click link "Remember the Wizzy Wigs"
   a. Remind that last year Nettie and Webster showed us what wizzy wigs were – like "hot heads" and "Follow you Fionas", etc.
   b. Click Next button
   c. Click link to watch "The Boy Who Loved IM"
   d. Click Next button

    e. Have students answer the next 2 questions (correct answer spins)

    f. Click Back button to return to menu

6) Click the Link to "Review Internet Safety Rules"
   a. Click BACK button again to return to menu

7) Time permitting – Click Link to play – "Who's Your Friend on the Internet" and / or games from Internet Safety games page

8) Click the Back button to return to the menu after games

Always say "NO" when asked if you want to save the Notebook file

9)

<u>Internet Safety 4th Grade</u>

1) Open folder called 4th Grade

    2) Open Notebook file called "4th Grade Internet Safety Lesson.Notebook"

3) Click the Link "What is the Internet?"
   a. Ask Question on screen "What is the Internet?" & discuss
   b. Click ONCE on the box to reveal the answer
   c. To go to the next question – click the Next button
   d. Ask the next 3 questions the same way:
      i. What is a Network?
      ii. What is the World Wide Web?
      iii. Why do we study Internet Safety?
   e. Click the Back button to return to the menu

4) Explain that you are going to watch the "Cyperpigs Adventure"
   a. Ask them to be looking for answers to the following questions:
      i. How much is too much information to give out?
      ii. Is chatroom chatting safe?
      iii. What is spam?
      iv. What are on-line predators?
   b. Click the link "Cyberpigs Adventure 1"
      i. Click the "Privacy Playground" to watch the video
      ii. Answer questions together as you go through it
      iii. Close the Internet window and it will return to Notebook
      iv. Click the Back button to return to the menu

5) Click the link "Are you Netwise – Take the Quiz"
   a. Ask the class the first question and click their answer choice
   b. Click "Next" to go through the 3 questions, then "Finish"

6) Click either "Return to Menu" or if time permits – click "Internet Safety Games"

7) Click the Back button to return to the menu after games

8) Always say "NO" when asked if you want to save the Notebook file

Internet Safety 5th Grade

1) Open folder called 5th Grade

2) Open Notebook file called "5th Grade Internet Safety Lesson"

3) Click the Link "Review Privacy Playground"
   a. Remind students of what they saw in the previous Cyberpigs video in 4th grade (there are 2 pages of review with screenshots from Cyberpigs Adventure 1)
   b. Review terms such as "Spam", "Internet predator" and why we shouldn't give out personal information on the Internet
   c. To get back to the menu, click the back button

4) Explain that you are going to watch the "Cyperpigs 2nd Adventure – Cybersense and Nonsense"
   a. Have them watch for new terms
      i. Cyber-Bullying
      ii. Flaming
      iii. Netiquette
   b. Click the link to "Cyberpigs Adventure 2"
      i. Click "CyberSense & Nonsense" to start the video
      ii. Answer questions together as you go through it
      iii. Close the Internet window and it will return to Notebook
      iv. Click the Back button to return to the menu

5) Click Link "Are you Netwise?"
   a. Have students play the matching game and check answers
   b. Click the Next button
   c. Have students answer the 3 question quiz – click Finish
   d. Click back button to return to the menu

6) Time – permitting – Go to Game Links page

7) Click the Back button to return to the menu after games

8) Always say "NO" when asked if you want to save the Notebook file

Internet Safety Program
Middle School Students

Program Objectives

Students will:

- Develop a comprehensive understanding of the concept of cyber community and good cyber citizenship.
- Exhibit legal and ethical behaviors when using information and technology.
- Recognize and avoid dangerous, destructive or unlawful online behavior.
- Demonstrate an understanding of the consequences of misusing technology.
- Demonstrate the correct use of fair use and copyright regulations.
- Demonstrate compliance with the school division's Acceptable Use Policy and other legal guidelines.

Computer Technology Standards of Learning for Virginia's Public Schools

- The students will demonstrate knowledge of ethical, cultural, and societal issues related to technology (VA SOL C/T 6-8.3).
- The students will practice responsible use of technology systems, information, and software (VA SOL C/T 6-8.4).

Units of Study

A. Cyber Citizenship
    1. Powerpoints 6-7-8
    2. Online Instructional Information and Discussion
    3. Activities 6-7-8

B. Cyber Bullying
    1. Powerpoints 6-7-8
    2. Video
        - 6th Grade - Feathers in the Wind
        - 7th Grade Best Friend
        - 8th Grade Can't Take it Back
    3. Activities 6-7-8
    4. Morning Announcements Video Clips
        - Cyber Bullying
        - Don't Get Pushed Around

C. Cyber Safety
    1. Powerpoints: Personal Safety 6-7-8 and Predator Identification 6-7-8
    2. Video
        - 6th – Soccer Girl and Tracking Teresa
        - 7th – Teen PSA Promises and Amy's Chioce
        - 8th – Teen PSA Promises and Julie's Journey
    3. Activities 6-7-8

D. Cyber Copyright

1. Powerpoints 6-7-8
2. Video
   - 6th and 7th – Hands (start at 1:40 using slider in Media Player)
3. Activities 6-7-8

High School Internet Safety Program Goals

1. Recognize and avoid dangerous, destructive, or unlawful online behavior

2. Demonstrate knowledge and understanding of Internet Safety issues

Objectives:

1. Students will demonstrate knowledge and understanding of issues relating to their personal privacy and social use of the Internet.

2. Students will demonstrate knowledge and understanding the concepts of Intellectual Property including but not limited to plagiarism, copyright, and public domain.

3. Students will demonstrate knowledge and understanding of malicious code and identity theft as it relates to security of computers and information on the Internet.

4. Students will demonstrate knowledge and understanding of issues relating to cyber-citizenship, including but not limited to steganography, computer hacking, and cyber terrorism.

5. Students will demonstrate knowledge and understanding of cyber harassment.

Implementation:

Materials used for the implementation of this program will be primarily derived from the *i-Safe* program. Supplemental materials will be added as needed to specifically meet the needs of Lynchburg City School high school students.

Ninth grade students will complete the online *i-Safe* pre-assessment survey during library media orientation through English classes each September. Upper classmen will complete the survey in their targeted classes prior to the presentation of the lesson.

Specific topics will be addressed in the health and family living classes, English and social studies classes, and applicable computer classes. The lessons will include an *i- Safe* webcast and structured class discussion and activities to be conducted by the classroom teacher, Instructional Technology Specialist, Media Specialist, and / or School Resource Officer as deemed necessary by the material being presented. The teacher will notify the building Instructional Technology Specialist when the appropriate *i-Safe* webcast lesson has been completed.

Below is a chart of targeted classes and webcasts.

i-Safe Webcast	Target class	Grade level
Privacy and the Internet	Health and Family Living	9th
Cyber Relationships	Health and Family Living	9th
Cyber Harassment	Health and Family Living	9th

Intellectual Property	Selected English and Social studies classes	9th-10th
Cyber Citizenship	Government / AP Political Science	12th
Security: Malicious Code	Computer Maintenance	10th-12th
	Computer Systems Technology	11th-12th
	Computer Programming I and II	9th-12th
	Computer Applications	9th-12th

Additional Materials Available Online:

Objective	Resource material
1	http://www.missingkids.com/adcouncil/lingo.html# (Internet safety quiz)
	www.netsmartz.org (video – ―Tracking Teresa‖)
	www.webwisekids.org (tour – statistics)
	www.netsmartz.org (video – ―Amy's choice‖)
	http://www.idthecreep.com/ (interactive game)
	http://tcs.cybertipline.com/knowthedangers7.htm (tips for posting information)
	http://www.livewwwires.com/ (―Missing‖ game)
	http://www.livewwwires.com/ (―Mirror Image‖ video)
2	http://pinetlibrary.com/classpage.php?page_id=3841&status=lasthttp://pinetlibrary.com/classpage.php?page_id=3841&status=last
	http://owl.english.purdue.edu/handouts/research/r_paraphrEX1.htmlhttp://owl.english.purdue.edu/handouts/research/r_paraphrEX1.html (practice paraphrasing activities)
	http://www.library.ucla.edu/bruinsuccess/ (Success with Less Stress)
	http://www.definetheline.com/ (software piracy)
	www.copyrightkids.orghttp://www.copyrightkids.org/
http://www.copyrightkids.org/	http://www.copyrightkids.org/
3	http://www.securityfocus.com/news/8908 (Avoiding Identity Theft)
4	
5	www.netsmartz.org (video – ―Cyberbullying – You can't take it back‖)
	www.netsmartz.org (video - ―Cyberbullying – Broken friendship‖)
	http://www.ncvc.org/tvp/main.aspx?dbID=dash_Home – teen victim project/ bullying
	http://www.stopcyberbullying.org/index2.html (click 14-17, then *Are you a cyberbully?*)

	http://www.stopcyberbullying.org/index2.html - what's the law?
General	http://www.emck.net/reelschool/documents/d4_contest_topics_sec.dochttp://www.emck.net/reelschool/documents/d4_contest_topics_sec.doc (general information sheets on numerous topics related to objectives)
	www.emck.net (ReelSchool links to student produced PSAs on a variety of Internet safety topics)

Good sites for younger students:

http://www.cybercrime.gov/rules/kidinternet.htmhttp://www.cybercrime.gov/rules/kidinternet.htm
http://www.cybercrime.gov/rules/kidinternet.htm
http://www.cybercrime.gov/rules/kidinternet.htm

Agenda Report

Date: 01/19/16

Agenda Number: G-2

Attachments: No

From: Scott S. Brabrand, Superintendent
John C. McClain, Assistant Superintendent for Student Learning and Success

Subject: 2016 Lynchburg City Schools Summer School Programs

Summary/Description:

Each year the school administration brings summer school offerings to the school board for approval of programs. This presentation will provide the school board with a summary of recommended dates, times, and locations for Lynchburg City Schools summer school programs including: Elementary Remedial, Elementary PETAL, Elementary Enrichment program, Middle School Remedial, Middle School PETAL, High School Remedial for Course Credit, High School PETAL, and High School SOL Academy.

Disposition: ☐ **Action**
☒ **Information**
☒ **Action at Meeting on:** 02/02/16

Recommendation:

The superintendent recommends that the school board receive this agenda report as an informational item and consider action at the school board meeting on February 2, 2016.

Agenda Report

From: Scott S. Brabrand, Superintendent
                 John C. McClain, Assistant Superintendent for Student Learning and Success

Subject: Promise Plan: Discipline and Behavior

Summary/Description:

The Lynchburg City Schools is involved in a variety of endeavors to improve the support provided relative to student behaviors and the manner in which discipline is used. This presentation will provide an update on an array of current activities in relation to Promise Plan Strategy Clusters 1, 3, 6, and 7.

Disposition: ☐ **Action**
                 ☒ **Information**
                 ☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board receive this agenda report as an informational item.

Agenda Report

From: Scott S. Brabrand, Superintendent
                John C. McClain, Assistant Superintendent for Student Learning and Success

Subject: Promise Plan: School Climate and Culture

Summary/Description:

Each school year, and as part of Strategy Cluster 2 of the Promise Plan, the Lynchburg City Schools administers a survey of students, parents, and staff regarding the climate and culture in the schools. This presentation will provide a summary of the results from the fall 2015 survey.

Disposition: ☐ **Action**
                   ☒ **Information**
                   ☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board receive this agenda report as an informational item.

Agenda Report

Date: 01/19/16

Agenda Number: G-5

Attachments: No

From: Scott S. Brabrand, Superintendent
           John C. McClain, Assistant Superintendent for Student Learning and Success

Subject: Promise Plan: GEAR-UP Grant Update

Summary/Description:

The Lynchburg City Schools is currently implementing the GEAR-UP grant with the eighth grade cohort. This presentation will provide an update on activities from the first semester and a look ahead at the second semester. This grant is part of Strategy Cluster #5.

Disposition: ☐ **Action**
                 ☒ **Information**
                 ☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board receive this agenda report as an informational item.

Agenda Report

From: Scott S. Brabrand, Superintendent

Subject: Notice of Closed Meeting

Summary/Description:

Pursuant to the Code of Virginia §2.2-3711 (A) (1), the school board needs to convene a closed meeting for the purpose of discussing the following specific matters:

Employee Performance

Disposition: ☒ **Action**
                        ☐ **Information**
                        ☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board approve a motion to enter into Closed Meeting in accordance with the Code of Virginia §2.2-3711 (A) (1) discuss specific employee performance.

Agenda Report

From: Scott S. Brabrand, Superintendent

Subject: Certification of Closed Meeting

Summary/Description:

The Lynchburg City School Board certifies that, in the closed meeting just concluded, nothing was discussed except the matters specifically identified in the motion to convene in a closed meeting and lawfully permitted to be so discussed under the provisions of the Virginia Freedom of Information Act cited in that motion.

Disposition: ☒ **Action**
                   ☐ **Information**
                   ☐ **Action at Meeting on:**

Recommendation:

The superintendent recommends that the school board approve the Certification of Closed Meeting in accordance with the Code of Virginia §2.2-3712(D).