

Virginia Board of Education Agenda Item



Agenda Item: D

Date: May 22, 2014

Title	First Review of Proposal to Establish the Bedford County Public Schools Governor's Health Sciences Academy		
Presenter	Ms. Lolita B. Hall, Director, Office of Career and Technical Education Services Dr. Fred Conner, Supervisor for Career and Technical Education		
E-mail	LB.Hall@doe.virginia.gov	Phone	(804) 225-2051

Purpose of Presentation:

Other initiative or requirement. Specify below:
Approval of Governor's Health Sciences Academy

Previous Review or Action:

No previous review or action.

Action Requested:

Action will be requested at a future meeting. Specify anticipated date below:
Date: June 26, 2014
Action: Final review

Alignment with Board of Education Goals: Please indicate (X) all that apply:

X	Goal 1: Accountability for Student Learning
	Goal 2: Rigorous Standards to Promote College and Career Readiness
X	Goal 3: Expanded Opportunities to Learn
	Goal 4: Nurturing Young Learners
	Goal 5: Highly Qualified and Effective Educators
	Goal 6: Sound Policies for Student Success
	Goal 7: Safe and Secure Schools
	Other Priority or Initiative. Specify:

Background Information and Statutory Authority:

Goal 1: The Academy must meet rigorous criteria established by the Board of Education under the Governor's Science, Technology, Engineering, and Mathematics Academy Program. Students progress in academic and technical knowledge and skills; and their employability knowledge and skills are monitored and measured annually to ensure successful transition to college and career.

Goal 3: The Academy is designed to expand options for students' health science literacy and other critical knowledge, skills, and credentials that will prepare them for high-demand, high-wage and high-skill health sciences careers in Virginia.

On September 7, 2012, the Virginia Department of Education announced planning/implementation

grants in the amount of \$10,000 each for establishment of Governor’s Health Sciences Academies in the eight superintendents’ regions. The Governor’s Health Sciences Academies shall consist of partnerships of one or more public school divisions or multiple schools within a school division, healthcare institutions, business and industry, and higher education institutions; and offer rigorous academic content with career and technical instruction. The Academy must include specialty programs within the five career pathways.

Health Sciences Career Cluster

Career Pathways	General Description
Therapeutic Services	Care and treat patients to improve their health over time. Counsel patients and provide them the tools needed to live a healthier and problem-free lifestyle.
Diagnostic Services	Use tests and evaluations to aid in the detection, diagnosis and treatment of diseases, injuries or other physical conditions.
Health Informatics	Manage health care agencies by overseeing all patient data, financial information and technological applications to health care processes and procedures.
Support Services	Assist health care professionals with a range of administrative and maintenance duties to ensure that the health care environment is maintained.
Biotechnology Research and Development	Discover new treatments and medical technologies to improve human health and advance the overall health science field.

At least two of the health sciences career pathways must be implemented initially. The remaining three pathways must be fully articulated and implemented within the next three years. Also, the Academy must agree to participate in the Governor’s Exemplary Standards Award Program.

The State Council of Higher Education for Virginia (SCHEV) is currently reviewing the attached proposal. Their report and recommendation is expected by June 2 prior to the second review of the proposal by the Board of Education (Attachment B). Staff members of the Virginia Department of Education (VDOE) have reviewed the proposal in the context of the established criteria. An executive summary of the proposal is in Attachment A. Attachment C is the report from the review by the VDOE. Attachment D is the complete proposal.

Currently, there are eight Governor’s Health Sciences Academies in Virginia. They are located in Albemarle County, Chesterfield County, Cumberland County, Fairfax County (two), Gloucester County and Mathews County, Hampton City, and Newport News City and York County.

Summary of Important Issues:

The Bedford County Public Schools Governor’s Health Sciences Academy will be located at the Bedford Science and Technology Center. Beginning in 2014-15, the Academy will offer the plan of study pathway for Biotechnology Research and Development and Therapeutic Services. Implementation of the Diagnostic Services and Support Services pathways will begin in 2015-16. By 2016-17, the Health Informatics pathway will be implemented. When fully implemented, the Academy will have the capacity to enroll 200 students, grades 10-12.

The Academy’s health sciences pathways plan of study will provide the core academic, technical, and employability skills, and credentials necessary for successful transition to postsecondary education and careers. Coursework will be delivered at Bedford’s three high schools, Bedford Science and Technology Center, and Central Community College (Early College coursework and XLR8 programming). Emphasis will be placed on raising the rigor of career and technical education

coursework, increasing student enrollment and success in dual enrollment courses, and providing increased work-based learning. Students will have access to modern medical practices through a broad range of real-world experiences through job shadowing, mentorships, service learning, internships, or clinical rotations.

Collaborative partnerships have been formalized between Bedford County schools and XLR8 Lynchburg Regional Governor's STEM Academy; Central Virginia Community College; representatives from Lynchburg College and Liberty University; area hospitals, nursing homes, medical laboratories, medical offices, emergency medical providers and private practitioners; Centra and its healthcare affiliates; Bedford County Department of Economic Development; and Bedford Area Chamber of Commerce.

According to the Virginia Employment Commission, the Health Care and Social Assistance Industry is projected to see rapid growth by 2020. Health care will be the fifth-largest employer and third-fastest-growing industry in Bedford and neighboring cities and counties. All five health sciences pathways are projected to grow, with Biotechnology Research and Development forecast to grow fastest. The health care industry was estimated to have a \$28 billion economic impact in Virginia in 2011. With well over 100,000 prospective employment opportunities in Virginia health care between 2010 and 2020, investing in education and training will be crucial for Virginia's future. The Governor's Health Sciences Academy pathway programs will help to bridge training and preparation in high-demand, high-skill, and high-wage careers in Region 5–Valley and the entire state.

Impact on Fiscal and Human Resources:

Funding for implementation must be provided at the local level.

Timetable for Further Review/Action:

The proposed beginning date for the Bedford County Public Schools Governor's Health Sciences Academy is school year 2014-15.

Superintendent's Recommendation:

The Superintendent of Public Instruction recommends that the Board of Education accept for first review the proposal to establish the Bedford County Public Schools Governor's Health Sciences Academy.

Bedford County Public Schools
Governor's Health Sciences Academy
Executive Summary
May 5, 2014

Partnership:	Bedford County Public Schools, XLR8 Lynchburg Regional Governor's STEM Academy, Bedford County Department of Economic Development, Bedford Area Chamber of Commerce, Central Virginia Community College, Centra, Lynchburg College, and Liberty University.
Lead/Fiscal Agent:	Bedford County Public Schools
Lead Contact Person:	Dr. Fred Conner Supervisor for Career and Technical Education Bedford County Public Schools 310 South Bridge Street Bedford, VA 24523 504 586-1045 fconner@bedford.k12.va.us
Academy Locations:	Bedford Science and Technology Center 600 Edmund Street Bedford, VA 24551
Number Students:	The Governor's Health Sciences Academy will have the capacity to enroll 200 students, grades 10-12. During the initial school year (2014-2015) applications will be accepted for 75 students.
Career Pathways:	Biotechnology Research and Development (2014-2015) Therapeutic Services (2014-2015) Diagnostic Services (2015-2016) Support Services (2015-2016) Health Informatics (2016-2017)
Academy Goals and Description:	<p>The overall goals of the Governor's Health Sciences Academy are to provide expanded options for students' health science literacy and other critical knowledge, skills, and credentials that will prepare them for high-demand, high-wage, and high-skills health sciences careers in Virginia.</p> <p>Specific Governor's Health Sciences Academy objectives include:</p> <ul style="list-style-type: none"> • Improve academic achievement of students in the Academy; • Increase completion of dual enrollment courses by raising the rigor and pursuing dual enrollment of select courses included in the Diagnostic Services, Support Services, and Health Informatics pathways; • Provide career-relevant work-based learning experiences for students through strong partnerships with businesses and health care providers in the form of clinical experiences, internships, and career exploration business tours;

- Increase high school graduation rates by establishing early relationships with students interested in healthcare professions and helping them develop academic and career plans outlining a clear pathway of coursework and learning opportunities aligned with their career goals;
- Reduce dropout rates; and
- Increase enrollment and retention in postsecondary education by giving students an opportunity to earn dual enrollment credits and begin postsecondary educational programs prior to high school graduation.

**Program
Highlights:**

As a result of participating in the Governor's Health Sciences Academy, students will:

- Gain a deeper understanding of the skills and knowledge incorporated in health sciences fields of study through exploration and observation in real-world settings;
- Benefit from specialized, project-based courses which develop critical-thinking, problem-solving, and decision-making skills, preparing them for the 21st century world;
- Acquire greater communication and collaborative skills;
- Develop workplace readiness skills in the areas of personal communication, professionalism, and technology use;
- Increase opportunities to earn nurse aid, practical nursing, and emergency medical technician credentials that validate the attainment of marketable knowledge and skills that provide competitive advantage when entering the work force or applying to postsecondary institutions;
- Obtain meaningful hands-on experiences in their career pathway studies; and
- Benefit from internships, mentorships, clinical and other work based-learning experiences that provide students opportunity to further explore, confirm, refine, or re-focus their career goals.

The State Council of Higher Education for Virginia (SCHEV)

Review of the Bedford County Public Schools Proposal to Establish a Governor's Health Sciences Academy

NOTE: The SCHEV staff is currently reviewing the proposal. Their report and recommendation will be provided prior to the second review of the proposal by the Board of Education.

**Virginia Department of Education
Governor's Academy for
Health Sciences Planning Grant
Proposal Review Checklist**

**For
Bedford County**

Governor's Health Sciences Academy

**Virginia Department of Education
Governor’s Academy for Health Sciences
Planning Grant Proposal Review Checklist**

I. Partnership Capacity

Partnerships desiring to implement a Governor’s Academy for Health Sciences shall provide the Department of Education with evidence of the following:

Criteria	Documentation			Comments
	Full	Partial	None	
A. An active, ongoing planning committee, including a list of members and signed certifications from each that they are willing and able to serve in that capacity. At a minimum, members must represent regional K-12 education (superintendents or designee), higher education, healthcare agencies, and business and industry. All partners must be represented on the committee.	X			
B. An advisory committee, including a list of members and signed certifications from each that they are willing and able to serve in the capacity.	X			
C. A written memorandum of agreement among school divisions, local businesses, postsecondary institutions, and any other partners that outlines ways in which community resources will contribute to the Governor’s Academy for Health Sciences to broaden the scope of students’ educational experiences.	X			
D. A statement of assurances that the Governor’s Academy for Health Sciences Planning Committee has reviewed provisions of <i>Administrative Procedures Guide for the Establishment of Governor’s Academies for Health Sciences</i> and agrees to follow the guidelines set forth in the document (see appendix).	X			

Criteria	Documentation			Comments
	Full	Partial	None	
E. A statement of assurances that an ongoing Governing Board will be established to reflect current Board of Education regulations relative to jointly operated schools and programs (see appendix).	X			
Comments:				

II. Need/Rationale for the Academy

Partnerships desiring to implement a Governor’s Academy for Health Sciences shall provide the Department of Education with evidence of the following:

Criteria	Documentation			Comments
	Full	Partial	None	
A. Demonstration of the need/rationale for the Academy. This statement should be concise and state the major reasons to have a Governor’s Academy for Health Sciences, including need at the state, regional, and local levels.	X			
B. A description of the enhanced or additional offerings in health sciences as well as in career and technical education that will meet the need described above.	X			
C. A fiscal agent that is a school division, including a certification that the division is willing and able to serve in that capacity.	X			
Comments:				

III. Program Description

Each regional Governor’s Academy for Health Sciences planning committee shall develop cooperatively with at least two or more school divisions, business and industry, community, healthcare agencies, and higher education partners and have available for review and dissemination, a program description.

A. A statement of program goals addressing the following criteria:

Criteria	Documentation			Comments
	Full	Partial	None	
1. Rigorous academic content with career and technical instruction.	X			
2. For year one of implementation, at least two of the five pathways for health sciences are well articulated and fully developed and available to students. The remaining three pathways must be fully articulated and implemented within the next three years.	X			
3. Individualized high school plans to ensure course selections that are aligned with students’ transition and career goals after high school.	X			
4. Evidence that graduates will complete a college and career readiness curriculum for a particular health science career pathway.	X			
5. Incorporation of <i>Virginia’s Workplace Readiness Skills for the Commonwealth</i> .	X			
Comments:				

B. A statement of program objectives and performance measures to:

Criteria	Documentation			Comments
	Full	Partial	None	
1. Improve academic achievement of Academy students;	X			
2. Increase completion of dual enrollment courses;	X			
3. Provide work-based experiences for students through strong partnerships with businesses;	X			
4. Increase high school graduation rates;	X			
5. Reduce dropout rates;	X			
6. Increase enrollment and retention in postsecondary education;	X			
7. Increase the proportion of students completing a college and career readiness curriculum in high school;	X			
8. Reduce the proportion of students requiring remediation in college;	X			
9. Increase the number of industry certifications awarded to high school students; and	X			
10. Increase the number of graduates employed in high-wage, high-demand and high-skill careers.	X			
Comments:				

C. A brief description of the proposed program, including:

Criteria	Documentation			Comments
	Full	Partial	None	
1. Site location;	X			
2. Number of students to be served;	X			
3. Grade levels;	X			
4. Curriculum design including CTE and academic;	X			
5. List of courses to be delivered;	X			
6. Description of how/where the courses will be delivered. Courses may be delivered on a high school, technical center or community college campus, online, or in other innovative ways; and	X			
7. Designation of full-day or part-day, academic-year program.	X			
Comments:				

D. Evidence of participation in the Governor’s Exemplary Standards Award Program for Career and Technical Education:

Evidence	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

E. Program and course descriptions:

E.1. For year one of implementation, at least two of the five well-articulated career pathways in health sciences must be available for students. The remaining three health sciences pathways must be implemented within the next three years.

Each of the five health science pathways must meet the following criteria:

Criteria	Documentation			Comments
	Full	Partial	None	
Pathway #1 – Therapeutic Services				
a. Must include opportunities to earn industry credentials, postsecondary certificates, diplomas or associate degrees while in high school and pursue additional industry credentials and academic degrees at the associate, bachelors and graduate levels.	X			
b. Must be in a high demand health science field identified by a statewide authority or organization, such as the Virginia Economic Development Partnership as a strategic growth area for Virginia, or	X			
c. Must address regional and local work force demand in high-wage, high-skill occupations as identified by employers and work force officials.	X			
d. This career pathway should drive the innovative capacity of the region and/or state.	X			
Comments:				

Criteria	Documentation			Comments
	Full	Partial	None	
Pathway #2 – Diagnostic Services				
a. Must include opportunities to earn industry credentials, postsecondary certificates, diplomas or associate degrees while in high school and pursue additional industry credentials and academic degrees at the associate, bachelors and graduate levels.	X			
b. Must be in a demanded health science field identified by a statewide authority or organization, such as the Virginia Economic Development Partnership as a strategic growth area for Virginia, or	X			
c. Must address regional and local work force demand in high-wage, high-skill occupations as identified by employers and work force officials.	X			
d. This career pathway should drive the innovative capacity of the region and/or state.	X			
Comments:				

Criteria	Documentation			Comments
	Full	Partial	None	
Pathway #3 – Health Informatics				
a. Must include opportunities to earn industry credentials, postsecondary certificates, diplomas or associate degrees while in high school and pursue additional industry credentials and academic degrees at the associate, bachelors and graduate levels.	X			
b. Must be in a demanded health science field identified by a statewide authority or organization, such as the Virginia Economic Development Partnership as a strategic growth area for Virginia, or	X			
c. Must address regional and local work force demand in high-wage, high-skill occupations as identified by employers and work force officials.	X			
d. This career pathway should drive the innovative capacity of the region and/or state.	X			
Comments:				

Criteria	Documentation			Comments
	Full	Partial	None	
Pathway #4 – Support Services				
a. Must include opportunities to earn industry credentials, postsecondary certificates, diplomas or associate degrees while in high school and pursue additional industry credentials and academic degrees at the associate, bachelors and graduate levels.	X			
b. Must be in a demanded health science field identified by a statewide authority or organization, such as the Virginia Economic Development Partnership as a strategic growth area for Virginia, or	X			
c. Must address regional and local work force demand in high-wage, high-skill occupations as identified by employers and work force officials.	X			
d. This career pathway should drive the innovative capacity of the region and/or state.	X			
Comments:				

Criteria	Documentation			Comments
	Full	Partial	None	
Pathway #5 – Biotechnology Research and Development				
a. Must include opportunities to earn industry credentials, postsecondary certificates, diplomas or associate degrees while in high school and pursue additional industry credentials and academic degrees at the associate, bachelors and graduate levels.	X			
b. Must be in a demanded health science field identified by a statewide authority or organization, such as the Virginia Economic Development Partnership as a strategic growth area for Virginia, or	X			
c. Must address regional and local work force demand in high-wage, high-skill occupations as identified by employers and work force officials.	X			
d. This career pathway should drive the innovative capacity of the region and/or state.	X			
Comments:				

E.2. List of all requirements for successful program completion:

Requirement for Program Completion	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

E.3. Academy graduates must achieve one or more of the following benchmarks:

Criteria	Documentation			Comments
	Full	Partial	None	
a. Earn one or more industry certifications or state occupational licenses, and/or demonstrate competencies on an assessment instrument recognized by postsecondary institutions such as CLEP examinations, collaboratively designed or mutually approved end-of-course tests, college placement tests, or student portfolios reviewed by a team of college and high school faculty; or	X			
b. Earn at least nine transferable college credits as defined in the Early College Scholars program (includes dual enrollment, AP and other options); or	X			
c. Earn an Associate Degree.	X			
Comments:				

E.4. Significant work-based experience must be included representing additional instruction or training beyond the classroom such as:

Criteria	Documentation			Comments
	Full	Partial	None	
a. Cooperative Education; <u>or</u>	X			
b. Internships; <u>or</u>	X			
c. Job Shadowing; <u>or</u>	X			
d. Mentorships; <u>or</u>	X			
e. Project-based learning; <u>or</u>	X			
f. Service learning; <u>or</u>	X			
g. A combination of the above.	X			
Comments:				

F. Length of program and daily schedule

Governor’s Academies for Health Sciences are defined by program content, not by the location or delivery system of courses. Evidence of the following must be submitted:

Comments	Documentation			Comments
	Full	Partial	None	
Designation of full-day or part-day, academic-year program.	X			

G. Assurance from the fiscal agent that on-going operating funds and facilities are available to support the Governor’s Academy for Health Sciences and are adequate to meet the needs of the program.

Evidence	Documentation			Comments
	Full	Partial	None	
	X			

H. Materials and equipment to be provided to accomplish program goals and objectives.

Evidence	Documentation			Comments
	Full	Partial	None	
	X			

I. A brief description of the proposed program, including:

Criteria	Documentation			Comments
	Full	Partial	None	
1. A review of the Academy’s policies, procedures, and outcomes;	X			
2. A review of the program design and instructional delivery;	X			
3. Consideration of feedback from students, staff, parents, the community, and partnership members, and	X			
4. Annual collection and reporting of data to the Department of Education related to student achievement, goal achievement, and other indicators.	X			
Comments:				

IV. Administrative Procedures

Each Governor’s Academy for Health Sciences must develop and maintain procedures developed cooperatively with participation partners. There should be evidence of procedures in the seven areas that follow:

A. Partnerships – The role of business and industry, public school divisions, health science related agencies, and postsecondary institutions in the partnership, and where appropriate, should include the role of work force and economic development entities.

Evidence	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

B. Student recruitment, selection criteria, and admissions.

Evidence	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

C. Code of student conduct and attendance.

Evidence	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

D. Transportation provided by the appropriate school division is in compliance with all applicable federal and state regulations.

Evidence	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

E. Staff recruitment, selection, and assignment – The Governor’s Academy for Health Sciences shall hire staff members who meet the Virginia teacher licensure requirements and/or postsecondary faculty qualifications. Where applicable, they must have industry-specific education with training and experience, including industry certification.

Evidence	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

F. Staff development – The program will provide appropriate staff training in addition to staff instructional planning time.

Evidence	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

G. Staff evaluation – Staff will be evaluated according to the human resources policies of the agency or institution employment Academy personnel.

Evidence	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

H. Parent, student and community involvement

Criteria	Documentation			Comments
	Full	Partial	None	
1. Preparation for entering the Academy should begin by eighth grade.	X			
2. Students, parents, teachers, and school counselors should work collaboratively to:	X			
a. Complete career interest inventories;				
b. Prepare academic and career plans outlining an intended course of study in high school;				
c. Review multiple postsecondary pathways and the steps required to pursue them;				
d. Participate in career assessments to identify areas students should strengthen to qualify for their selected health science pathway; and				
e. Discuss available diplomas, seals and other recognitions including admission to specialized programs such as Governor's Academies.	X			
Comments:				

V. Documentation of insurance, budget, and other fiscal information:

Criteria	Documentation			Comments
	Full	Partial	None	
Insurance	X			
Budget (from appendix)	X			
Budget Narrative	X			
Other				
Comments:				



**Bedford County Public
Schools'**

**Governor's Health
Sciences Academy**

**Governor’s Health Sciences Academy
Bedford Science and Technology Center**

I. Partnership Capacity.....	4
II. Need/Rationale for the Academy.....	5
III. Program Description.....	7
Statement of Program goals.....	7
Statement of Program Objectives and Performance Measures.....	12
Description of proposed program.....	14
Evidence of participation in the Governor’s Exemplary Standards Award Program for Career and Technical Education.....	24
Program and Course Descriptions.....	25
Requirements and Benchmarks for Program Completion.....	30
Work based experience.....	30
Academy Daily Schedule.....	31
Assurance from the fiscal agent.....	32
Materials and Equipment to be provided to accomplish goals and objectives.....	32
Description of proposed program evaluation.....	32
IV. Administrative procedures.....	33
Partnerships.....	33
Student recruitment, selection criteria, and admissions.....	33
Code of student conduct and attendance.....	34
Transportation.....	34
Staff recruitment, selection, and assignment.....	34
Staff Development.....	34
Staff Evaluation.....	35
Parent, student and community involvement.....	35
V. Documentation of insurance, budget, and other fiscal information.....	36
Appendices.....	38
A. Advisory Board and Planning Committee Members	
B. Advisory Board and Planning Committee Signed Agreements	
C. Clinical Memorandum of Agreements	
D. XLR8 Program of Study	
E. Sample Plans of Study	
F. Region 2000 Occupational Employment Data	
G. Western Virginia Occupational Employment Data	

- H. Bedford Science and Technology Center Bell Schedule
- I. Statement of Assurances
- J. Parent Program Information Samples
- K. Program Application/Scoring Rubric
- L. Budget
- M. Insurance

I. Partnership Capacity

Bedford County Public Schools proposes to establish a Governor's Health Sciences Academy to provide opportunities for all students enrolled in the division to explore and pursue their individual career interests in healthcare occupations. Student interest will be identified through surveys and career exploration activities completed during middle school guidance lessons. Identified students and their parents will be invited to a health career planning session where program opportunities and requirements will be outlined, dual enrollment and AP coursework will be defined, and information regarding postsecondary options/requirements will be introduced. This process will culminate in each student's development of an individual academic and career plan by the conclusion of eighth grade. This career plan will outline the students' high school and postsecondary coursework needed to meet their educational and career goals as well as prepare them for high-demand, high-wage, and high-skills health sciences careers in Virginia.

This proposal encompasses a collaborative partnership represented by members of:

- Bedford County Public Schools
- XLR8 Lynchburg Regional Governor's STEM Academy
- Area hospitals, nursing homes, medical laboratory facilities, medical offices, emergency medical providers, and private practitioners
- Bedford County Department of Economic Development
- Bedford Area Chamber of Commerce
- Central Virginia Community College
- Centra and its healthcare affiliates
- Representatives from Lynchburg College and Liberty University

From these entities, an active planning and advisory board has been established (see Appendix A - Advisory and Planning Committee Members). Membership has reviewed the provisions of the "*Administrative Procedures Guide for the Establishment of a Governor's Health Sciences Academy*" and agrees to follow the guidelines set forth in the document (see Appendix B - Advisory and Planning Committee Signed Documents). This collaborative group is composed of K-12 educational professionals, community and business partners, postsecondary representatives and local workforce and economic development entities with a shared vision to provide our students with the knowledge and skills needed to successfully enter the healthcare field. Members will meet regularly to evaluate the progress of the academy, provide guidance as additional curriculum is developed, expand community partnerships, and organize events/activities to broaden the scope of the students' educational experiences.

Bedford Science and Technology Center (BSTC) will partner with the division three middle schools (Bedford, Staunton River, and Forest), the XLR8 Lynchburg Regional Governor's STEM Academy, and Bedford County Public Schools' three high schools (Liberty, Staunton River, and Jefferson Forest) to provide all academy students with the guidance and educational opportunities needed to achieve their goal of becoming highly skilled health care professionals in the Commonwealth. Written agreements have been developed with Centra and Bedford Memorial Hospital (including Oakwood Health and Rehabilitation Center and Bedford Adult Day Center) to support student clinical experiences and learning opportunities in their facilities (Appendix C). Additional MOU to be established with Central Virginia Community College.

II. Need/Rationale for the Academy

Bedford County Schools has a long history of educating healthcare professionals to serve our community, beginning with our School Board's establishment of the Bedford School of Practical Nursing nearly 50 years ago. The Elks National Home, located in the heart of Bedford, boasts that every LPN currently employed in their facility is an alumna of this program. In addition, our CNA and EMT programs contribute significantly to the pool of professional healthcare providers in Bedford and the surrounding communities of Roanoke and Lynchburg. Though each of these programs allows students the opportunity to obtain state licensure upon completion, recent surveys of student career goals revealed that we were not addressing 21st century advances within the field, providing STEM opportunities, or meeting the needs of students interested in pursuing healthcare careers requiring training and education past high school graduation.

Data from the United States Department of Labor-Bureau of Labor Statistics show health care is anticipated to be one of the fastest-growing occupations in the nation between 2008-2018. Information obtained from the Virginia Employment Commission supports this profile in our region with health care being the fifth-largest employer and third-fastest-growing industry in Bedford. In the neighboring city of Lynchburg, health care is the fastest-growing field with Centra being the single largest employer within the city. Centra currently employs 6,000 people with a medical staff of 490 across Lynchburg General Hospital, Virginia Baptist Hospital, and Southside Community hospitals, health and rehabilitation centers, a regional cancer center, and physician practices. These facilities serve the Lynchburg area from Bedford to Farmville and from Nelson County to Danville. This employment trend is also evident in the city of Roanoke, our largest and closest neighbor to the west, providing a significant need for highly trained medical professionals in this region. More specifically, momentous occupational growth is expected nationally in many of the healthcare fields included in our proposal, including nursing assistant, registered nurse, radiological technician, and respiratory therapist fields growing faster than average (21 percent, 19 percent, 21 percent, 19 percent anticipated growth respectively) and medical laboratory technician,

licensed practical nurse, dental hygienist and emergency medical technician growing much faster than average (22 percent, 25 percent, 33 percent, 23 percent anticipated growth respectively) as published by the Bureau of Labor Statistics Occupational Outlook Handbook. Career interest surveys completed with high school juniors across our division reveal that 24 to 29 percent of students have aspirations within the field of health sciences. These students may not be adequately prepared for the rigor of higher education or have any pre-college healthcare experience without additions to our current program offerings.

General Information:

The Bedford County Public Schools' Governors' Health Sciences Academy is poised to address the established work force needs in our region, state, and nation by preparing our students with the academic, personal, and professional skills needed to be employed as skilled healthcare providers. Administered through clear pathways, our programs will focus on raising the rigor of current career and technical education coursework, increasing student enrollment/success in dual enrollment courses, and providing increased work-based experiences. Meeting these objectives is expected to increase high school graduation rates (including increased numbers of students obtaining an Advanced Studies Diploma), increased enrollment and retention rates in dual enrollment courses, and ultimately expand the number of graduates entering the work force from local postsecondary health sciences programs at local community colleges, technical programs, and four-year institutions.

Academy coursework will be delivered at division high schools, Bedford Science and Technology Center, and Central Virginia Community College (Early College coursework and XLR8 programming) as outlined in each student's individual academic career plan. Students possessing an unspecified interest in the healthcare field will be encouraged to participate as freshman and/or sophomores in our Introduction to Health and Medical Sciences course and related business tours to explore the career opportunities available within each of the five healthcare pathways. Each program will incorporate and build on *Virginia's Workplace Readiness Skills for the Commonwealth* to give our students the soft skills needed to find success in employment and internship opportunities. It is our goal through this academy to transform how health and medical sciences is taught in our division. We will give our students access to modern medical practices through integration of STEM-H learning opportunities, expose them to a broader range of career options beyond those of doctor and nurse, provide strong background knowledge in anatomy/physiology and medical terminology, and offer job shadowing, clinical rotations, or internship opportunities in all programs.

BSTC currently offers coursework within the Therapeutic Services pathway (CNA, LPN, and EMT programs) and through a partnership with the XLR8 Lynchburg Regional

Governor's STEM Academy in the Biotech, Research and Development pathway. In addition, preparatory coursework in Introduction to Health and Medical Sciences and Medical Terminology were added to our division's program of studies in the 2013-14 school year. Central Virginia Community College, located in Lynchburg with a satellite campus in the town of Bedford, has recently restructured its healthcare services curriculum to include programs of studies in Radiologic Technology, Respiratory Therapy Technology, EMT-Paramedic, Pre-Dental, Pre-Nursing, Medical Laboratory Technician, Medical Coding, and Pharmacy Technology. It is our goal that through the early development of individual career plans and partnerships with local healthcare agencies and institutions of higher learning we will be better prepared to support our students' interests in careers associated with the Diagnostic Services, Health Informatics and Support Services pathways which will be added to the Governor's Health Sciences Academy in the next three years.

Bedford County Public Schools will serve as the fiscal agent. The school division consists of three high schools from which students will be admitted to the Governor's Health Sciences Academy housed on the Bedford Science and Technology Center campus. Satellite program facilities will include the Bedford School of Nursing, on the grounds of Bedford Memorial Hospital, and XLR8 facilities located on the campus of Central Virginia Community College. The Governor's Health Sciences Academy will serve students from across Bedford County and the town of Bedford. Ongoing operating funds and facilities are available to support the Academy and are adequate for the current and future needs of the program.

III. Program Description

Statement of Program goals

The mission of the Bedford County Governor's Health Sciences Academy is to provide students with a clear educational pathway that will prepare them to meet their career goals in high-demand, high-wage, and high-skill health sciences careers in Virginia.

Each program will provide students with entry-level and college preparatory skills, creating a strong foundation toward attainment of their career/educational goals. Program curriculum will be aligned with course competencies associated with each career and technical education (CTE) course as outlined by the Virginia CTE Resource Center. Students will gain marketable skills as well as develop strong workplace readiness skills through emphasis placed on the Virginia Workplace Readiness Skills included in each CTE course. Students will have access and exposure to 21st century technology resources specific to their program of study, as well as hands-on, inquiry-based learning opportunities to support critical thinking/problem-solving skills, build strong communication skills, establish leadership capacities, and develop into lifelong

learners. Rigorous academic content in English, mathematics, and science will be available to each student at their base school through Advanced Placement, dual enrollment and Early College course options. Students may choose to participate in personalized learning options during a zero period or complete some graduation requirements in middle school to accommodate additional career coursework in their schedules during high school.

Once each student has applied and been selected to participate in the academy, they will meet with school counselors to outline a complete program of study. This unique program will offer integration of base-school general education, AP, and dual enrollment coursework in English, mathematics, and science with career-specific opportunities offered to 10th-, 11th-, and 12th-grade students at our regionally based academy. Students in 11th and 12th grade have the opportunity to participate in seven Advanced Placement courses to earn college credit. College English Composition and College Pre-Calculus are also available as dual enrollment college courses, each earning six college credits. Within the CTE programs, EMT is a dual enrollment course for a total of eight college credits which may be used to pursue a certificate in Paramedics or Advanced Firefighting. Additional dual enrollment options will be investigated by the advisory committee as the Health Sciences Academy develops. Students attending the XLR8 Lynchburg Regional Governor's STEM Academy have the opportunity to earn 24 transferable college credits (toward an associate degree).

During the 2014-15 school year, the Governor's Health Sciences Academy of Bedford County anticipates the enrollment of 40 students in programs within the Therapeutic Services Pathway (CNA, LPN, and EMT), 20 students in exploratory programs (Introduction to Health and Medical Sciences and Medical Terminology), and eight students within the Biotechnical, Research, and Development pathway (XLR8 Biotechnical Engineering). Additional pathways within the Diagnostic Services, Health Informatics, and Support Services fields aligned with postsecondary opportunities at Central Virginia Community College and area four-year institutions are anticipated to enroll an additional 75-100 students by year four. The ultimate goal of the Academy is to prepare Bedford County Public School students to support the growing need for healthcare professionals in Central and Southwestern Virginia.

Course Sequence

Governor's Health Sciences Academy students will complete the following core content course sequences:

GRADE	English/ Language Arts	Mathematics	Science	Social Studies/ Science	Health and Physical Education	Other Required Courses
7	English 7 (1110)/ adv English 7 (1112)	Prealgebra (3111) / Algebra I (3130)	Physical Science 7 (4125) / Adv Physical Science 7 (MS4126)	Civics and Economics (2357)	Health/ PE 7 (7122/7120)	
8	English 8 (1120)/ adv English 8 (1121)	Algebra Concepts (3112) / Algebra I (3130) / Pre AP Geometry (3154)	Earth Science (4210)	World History I (2341)	Health/PE 8 (7220/7210)	
9	English 9 (1130) / Pre-AP English 9 (1133)	Alegbra I (3130) / Geometry (3143) / Algebra II (3135) / Pre- AP Algebra II (3139)/ Pre-AP Geometry (3154)	Earth Science (4210) / Biology (4310) / Pre-AP Biology (4330)	World History II (2342)	Health 9 (7300) Health 10 (7405)	
10	English 10 (1140) / Pre-AP English 10 (1142)	Geometry (3143) / Algebra II (3135) / Pre AP Algebra II (3139) / Pre Calculus (3162) / DE College Pre- Calculus (3198)	Biology (4310) / Pre-AP Biology (4330) / AP Biology (4340) / Intro To Anatomy (4621) / Pre-AP Chemistry (4430) / Chemistry (4410)			Economics/Personal Finance (6120)
11	English 11 (1150) / Adv English 11 (1151) / AP English 11 Language (1152)	Algebra II (3135) / Pre AP Algebra II (3139) / Pre-Calculus (3162) / Algebra Functions (3134) / AP Calculus (3177/3179) / DE College Pre-Calculus (3198)	Pre-AP Biology (4330) / AP Biology (4340) / Intro To Anatomy (4621) / Pre-AP Chemistry (4430) / Chemistry (4410) / AP Chemistry (4470) / Physics (4510)	US History (2360) / AP US History (2319)		
12	English 12 (1160) / Adv English 12 (1161) / AP Literature (1195) / DE College English and Comp (1162)	Pre AP Algebra II (3139) / Pre-Calculus (3162) / Algebra Functions (3134) / AP Calculus (3177/3179) / DE College Pre- Calculus (3198) / AP Statisics (3192)	AP Biology (4340) / Intro To Anatomy (4621) / Pre-AP Chemistry (4430) / Chemistry (4410) / AP Chemistry (4470) / Physics (4510) / AP Physics (4573/4574/4571)	US Govt (2440) / AP US Govt (2445)		

Governor’s Health Sciences Academy students will complete the following career-specific course sequences:

Career-Specific Course Sequences for Biotechnology Research and Development				
Occupational Goal	10th Grade	11th Grade	12th Grade	Possible Certifications, Licnesures, and Postsecondary Certificates/Degrees
See Appendix D				<ul style="list-style-type: none"> Project Lead the Way End-of-Course Tests Mechatronics Certification (NOCTI)

Career-Specific Course Sequences for Diagnostic Services				
Occupational Goal	10th Grade	11th Grade	12th Grade	Possible Certifications, Licenses, and Postsecondary Certificates/Degrees
Radiology Technician	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Career Internship (9828)/ CVCC-Health Technology/Pre-Radiologic Technician	<ul style="list-style-type: none"> • Health Technology Career Studies Certificate (Pre-Radiologic Technology) • Radiologic Technology Associate of Applied Science Degree • Virginia's Workplace Readiness Skills for the Commonwealth
Other Diagnostic	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Leadership for Career Exploration (9097)	Career Internship (9828)	

Career-Specific Course Sequences for Support Services				
Occupational Goal	10th Grade	11th Grade	12th Grade	Possible Certifications, Licenses, and Postsecondary Certificates/Degrees
Dental Hygienist	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Career Internship(9828) /CVCC-Health Technology/Pre-Dental	<ul style="list-style-type: none"> • Virginia's Workplace Readiness Skills for the Commonwealth
Environmental Services	Building management (8590)	Building Management (8591)	Building Mgt Internship (9826)	
Medical Office Asst.	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)/Computer Information Systems	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)/ Computer Information Systems	Career Internship (9828) /CVCC-Administrative Support Technology Medical Office Socialization	
Other Support Service	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Career Internship (9828)	

Career-Specific Course Sequences for Therapeutic Services				
Occupational Goal	10th Grade	11th Grade	12th Grade	Possible Certifications, Licensures, and Postsecondary Certificates/Degrees
Certified Nurse Aid	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Anatomy (4621)/Nurse Aide (8360/62)	Nurse Aide (8360/62) / Career Internship (9828)	<ul style="list-style-type: none"> • Certified Nursing Assistant Certificate • Licensed Practical Nurse Certificate • Emergency Medical Technician Certification • Virginia's Workplace Readiness Skills for the Commonwealth
EMT (I and II)	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Anatomy(4621) / EMT I and II(8333/34)	EMT I and II (8333/34)/ Career Internship (9097)	
LPN	Medical Terminology (8383)/ Anatomy (4621)	Anatomy (4621)/Nurse Aide (8360/62)	Practical Nursing I (7871)	
RN	Medical Terminology (8383)/ Anatomy (4621)	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Nurse Aide (8360/62)/ CVCC-Health Technology/Pre-Nursing I program	
Respiratory Therapist	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Anatomy (4621)	Career Internship (9828)/ CVCC-Health Technology/Pre-Respiratory Therapy	
Athletic Trainer	Medical Terminology (8383)/ Anatomy (4621)	Intro to Athletic Training (9840)	Athletic Training II (9841)	
Other Therapeutic	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Leadership for Career Exploration (9097)	Career Internship (9828)	

Career-Specific Course Sequences for Health Informatics				
Occupational Goal	10th Grade	11th Grade	12th Grade	Possible Certifications, Licensures, and Postsecondary Certificates/Degrees
Medical Lab Technician	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Med Lab Tech I (8377)	Med Lab Tech II (8378)	<ul style="list-style-type: none"> • Certified Medical Lab Technician Certification • Medical Laboratory Technology Associate of Applied Science Degree • Virginia's Workplace Readiness Skills for the Commonwealth
Other Informatics	Intro to Health and Medical Sciences (8302)/ Medical Terminology (8383)	Leadership for Career Exploration (9097)	Career Internship (9828)	

Statement of Program Objectives and Performance Measures

Improve academic achievement of Academy students

- *Program Objectives:* Students participating in the Bedford County Public Schools' Governor's Health Sciences Academy will experience increased academic rigor and relevance.
- *Performance Measures:*
 - Increase the number of academy students meeting the requirements for an Advanced Studies Diploma by 10 percent over the next five years.
 - Increase the number of students who earn a grade of B or better in advanced mathematics and science courses by 10 percent over the next five years.

Increase completion of dual enrollment courses

- *Program Objectives:* Following collection of baseline data, the number of academy students earning dual enrollment credits through dual enrollment, Advanced Placement courses, and Early College opportunities will increase.
- *Performance Measures:*
 - Number of dual enrollment course offerings for academy students will increase by 5 percent annually over the next five years beginning in the 2014-15 school year.
 - Students participating in the Academy who receive a score of three or higher on AP exams will increase by 5 percent over the next five years.
 - Number of dual enrollment credits earned by students in the Academy will increase by 5 percent over the next five years. Students will earn at least nine postsecondary credits.

Provide work-based experiences for students through strong partnerships with businesses

- *Program Objectives:* 100 percent of students participating in the academy will participate in at least one work-based experience by the 2019-20 school year.
- *Performance Measures:*
 - The number of academy students participating in at least one job shadowing, clinical, or internship opportunity prior to graduation will increase by 10 percent each year in cooperation with our business and industry partners over the next five years.
 - Number of business and industry partners supporting our students and Health Sciences Academy programs will increase by 5 percent annually over the next five years.

- All students will participate in one or more business tours related to the healthcare industry over the next five years.

Increase high school graduation rates/reduce dropout rates

- *Program Objectives:* Following collection of baseline data, graduation rates for academy students will increase.
- *Performance Measures:*
 - The number of academy students graduating from high school will increase by 5 percent each year over the next five years.

Increase enrollment and retention in postsecondary education

- *Program Objectives:* Student surveys will be administered to Academy graduates at one year, three years, and five years post graduation to measure enrollment and retention in postsecondary education.
- *Performance Measures:*
 - The proportion of students completing postsecondary education related to their career pathway will increase by 5 percent annually over the next five years.

Increase the proportion of students completing a college and career readiness curriculum in high school

- *Program Objectives:* Additional health sciences pathways will be developed and actively promoted within the division's middle schools, high schools, and throughout the community.
- *Performance Measures*
 - Enrollment and completion rates will increase by 5 percent over the next five years within each career pathway and for academy participants as a whole.

Reduce the proportion of students requiring remediation in college

- *Program Objectives:* All academy students will take the CVCC College Placement Practice Online Assessment to identify areas of weakness in mathematics and English preparation to formulate student remediation plans as indicated.
- *Performance Measures:*
 - Decrease by 5 percent annually, over the next five years, the number of students requiring remediation in college by monitoring academy student scores on community college placements tests and or university entrance exams (SAT/ACT).

Increase the number of industry certifications awarded to high school students

- *Program Objectives:* Multiple opportunities to obtain industry credentials and licensure applicable to the healthcare field will be provided to students.
- *Performance Measures:*
 - All academy students will earn at least one credential, industry certification, or state license by the 2015-16 school year.
 - Increase the number of Governor's Health Sciences Academy students achieving two or more credentials by 10 percent annually.

Increase the number of graduates employed in high-wage, high-demand and high-skill health sciences careers

- *Program Objectives:* Student surveys will be administered to Academy graduates at one year, three years, and five years post graduation to measure student employment in identified career pathways and related occupations.
- *Performance Measures:*
 - Seventy-five percent of survey respondents will report gainful employment within the healthcare industry on the follow-up survey over the next five years.

Description of proposed program

Bedford County Governor's Health Sciences Academy

Site Location: Bedford Science and Technology Center, 600 Edmund Street, Bedford, VA 24523

Number of students to be served: The proposed Governor's Health Sciences Academy will serve 75 to 80 students in the 2014-15 school year. Each year following, the Academy will increase enrollment by 30 to 50 students, ultimately enrolling at least 200 students by school year 2017-18.

Grade Level: Students will be accepted into the Academy in the eighth grade. High school plans of study will be developed, including general education courses beginning in ninth grade and career specific coursework beginning in the 10th/ 11th grade. Students will participate through graduation.

Curriculum Design: Student career interest surveys and instructional activities administered by middle school counseling departments will be used to encourage, identify potential candidate's participation in the Health Sciences Academy. Students will be active participants in the development of their individual academic and career plan in collaboration with parents and counselors to establish a sequence of study through high school and postsecondary education. Sample plans of study are included

in Appendix E. Upon graduation, students will have obtained completer status in their CTE health career sequence of choice and had the opportunity to earn one or more industry credentials. Students will have the opportunity to earn up to six English and six mathematics dual enrollment credits as well as additional CTE-specific dual enrollment credits (up to eight) and may earn additional college credit or Advanced Placement opportunities at the secondary level for qualifying scores on end-of-course AP exams (15 available courses). AP and dual enrollment classes are considered to be advanced-level courses designed to prepare students for the rigor of college-level curriculum and expectations. College credit or placement allows students to move into upper-level courses sooner, pursue double majors, and/or graduate earlier. Students will enter the Virginia work force filling positions in a variety of high-wage high-skill health occupations identified as experiencing critical shortages by the Virginia Employment Commission and United States Department of Labor/Bureau of Labor Statistics.

List of Courses to be offered:

In addition to core content courses in English, mathematics, science, history/social science, health and physical education, music, art, and foreign language offered at the base high schools, students in the Health Sciences Academy will have the opportunity to take health-science-related CTE courses at Bedford Science and Technology Center.

Pre-AP English 9 (1133)

Grade Level: 9 4.5 Weighted Grading Scale Credit: 1 unit

Pre-AP English is an advanced-level course that will help students succeed in college and rigorous high school courses such as those offered by the Advanced Placement program. Students will be challenged to expand their skills in reading, writing, and research. Students' writing will focus on drafting and revising descriptive, narrative, expository, and persuasive essays. Literature study will explore themes of various authors. Students will learn to analyze fiction beyond the literal level. Searching for abstract meaning, the students will apply the ideas studied to their own lives. At the end of this course students will be able to analyze, reason, and understand for themselves, and will be better prepared for the Advanced Placement tests.

Pre-AP English 10 (1142)

Grade Level: 10 4.5 Weighted Grading Scale Credit: 1 unit

Pre-AP English is an advanced-level course that will help students succeed in college and rigorous high school courses such as those offered by the Advanced Placement program. Students will be challenged to expand their skills in reading, writing, and

research. Through the study of literature and use of critical thinking skills, students learn to recognize all universal literary themes and heighten their aesthetic appreciation of well-written works. Students will be exposed to a wider variety of writing and will spend time on developing a personal writing style. The majority of all writing assignments will complement the study of literature. At the end of this course, students will be able to analyze, reason, and understand for themselves, and will be better prepared for the Advanced Placement tests.

Advanced Placement English Language and Composition 11 (1152) SOL TEST

Grade Level: 11 5.0 Weighted Grading Scale Credit: 1 unit

Advanced Placement English Language and Composition prepares students to take the Advanced Placement exam for qualification to receive college credit. Students will write in specific forms: narrative, expository, and argumentative. The writing will cover a variety of subjects from personal to public policies, and from popular culture to imaginative literature. Students will develop skills in analyzing the rhetoric of prose passages and will demonstrate their skill by writing essays in various rhetorical modes. Upon completion of this course, students will be prepared to read complex text with understanding and write mature, fully-developed prose. Students in Advanced Placement classes are expected to take the College Board exam in addition to fulfilling all the English 11 curriculum requirements. The emphasis of this course is on preparing students for the Advanced Placement English Language and Composition examination.

Advanced Placement English Literature and Composition 12 (1195)

Grade Level: 12 5.0 Weighted Grading Scale Credit: 1 unit

Advanced Placement English Literature and Composition challenges students to read and interpret a wide range of imaginative works. The course invites students to explore a variety of genres and literary periods and to write clearly about the literature they encounter. On a daily basis, it asks them to read critically, think clearly, and write concisely about fiction and poetry. By the end of the course, students will be prepared for the Advanced Placement Literature and Composition exam and will have cultivated a rich understanding of literary works and acquired a set of analytical skills they will use throughout their lives. Rhetorical devices and argument skills learned in the Advanced Placement English Language and Composition 11 course with nonfiction readings will be refined and refocused for the literature and poetry studied in Advanced Placement 12. Students in Advanced Placement classes are expected to take the College Board exam in addition to fulfilling all the English 12 curriculum requirements. The emphasis of this course is on preparing students for the Advanced Placement English Literature and Composition examination.

College English Composition I and II (1162) DUAL ENROLLMENT

Grade Level: 12 5.0 Weighted Grading Scale Credit: 1 high school and 6 college

Prerequisites: CVCC requires students to pass the CVCC placement test before admission to the class.

College English is a dual enrollment class incorporating Central Virginia Community College English 111 (3 credits) and English 112 (3 credits) College Composition I and II. This course develops writing ability for study, work, and other areas of life based on experience, observation, research, and reading of selected literature. College English guides students in learning writing as a process, understanding audience and purpose, exploring ideas and information, composing, revising, and editing. The course supports writing by integrating composing, revising, and editing. The composing process is supported by thinking, reading, listening, and speaking.

Introduction to Health and Medical Sciences (8302)

Grade Level(s): 11-12 Credit: 2 units

Location: BSTC

This course introduces the student to a variety of healthcare careers and develops basic skills required in all health and medical sciences. It is designed to help students understand the key elements of the U.S. healthcare system and to learn basic terminology, anatomy and physiology for each body system, pathologies, diagnostic and clinical procedures, therapeutic interventions, and the fundamentals of traumatic and medical emergency care. Throughout the course, instruction emphasizes safety, cleanliness, asepsis, professionalism, accountability, and efficiency within the healthcare environment. Students also begin gaining job-seeking skills for entry into the health and medical sciences field. In addition, instruction may include the basics of medical laboratory procedures, pharmacology fundamentals, biotechnology concepts, and communication skills essential for providing quality patient care. Students interested in medical careers may take this class in conjunction with Medical Terminology for a complete sequence. The course includes an examination that confers certification from a recognized industry, trade, or professional association or a professional license from the Commonwealth of Virginia.

Nurse Aide A and B (8360, 8362)

Grade Level(s): 11 - 12 Credit: 3-4 units yearly

Prerequisites: Application * 2 36-week courses to be taken in the same year

Location: BSTC and clinical sites

The Nurse Aide program is offered at Bedford Science and Technology Center to 11th- or 12th- grade students interested in health careers and who have a desire to work with others. Students learn basic patient care skills and are provided with on-the-job experience in a nursing home setting. The program is designed so that completers can sit for the Certified Nurse Aide examination. An application and drug screening are required. Upon completing the course, students have the option of enrolling in Practical Nursing I during the senior year.

Practical Nursing I and II (8357, 8358)

Grade Level(s): 12-Adult Credit: 3 units yearly

Prerequisites: Application and placement test

Location: BSTC and clinical sites

Practical nursing is a vocation in which the qualified person is prepared to provide nursing care for patients in relatively stable situations with a minimum amount of supervision from the registered nurse and to function as an assistant to the registered nurse in more complex nursing situations. The practical nursing program is 18 months in length. The first nine months of instruction are at Bedford Science and Technology Center during the senior year in high school, which earns the student three units of high school credit. In the fall of the following year, the student begins a nine-month combined classroom and clinical work experience at Carillion Bedford Memorial Hospital. Criminal background check and drug screening are required. Students will have assigned learning experiences in the care of medical, surgical, pediatric, mental health, obstetric patients, and newborn infants. Graduates of the school are eligible to take the State Board Examination for a Practical Nursing license.

Emergency Medical Technician/Basic A and B (8333, 8334) DUAL ENROLLMENT

Grade Level(s): 11-12 5.0 Weighted Grading Scale Credits: 3 high school and 8 college

Location: BSTC * two 36-week courses to be taken in the same year

This course meets the requirements for CVCC courses EMS 112, EMS 113, EMS 100, and EMS 120.

This course prepares students for certification as a Virginia and National Registry EMT and includes all aspects of pre-hospital basic life support as defined by the National Highway Traffic Safety Administration's national curriculum for Emergency Medical Technician. Students focus on the roles and responsibilities of emergency rescue workers, basic medical terminology, and healthcare skills that include first aid, cardiopulmonary resuscitation, aseptic technique, and related anatomy, physiology, and

disease knowledge. Supervised work education at a rescue squad is a component of this course. Upon completion, students are eligible to sit for the EMT credentialing exam and seek employment within the community.

Medical Terminology (8383)

Grade Level(s): 11-12 Credit: 2 units

Location: BSTC

Medical Terminology is designed to help students learn healthcare language. Topics are presented in logical order, beginning with each body system's anatomy and physiology and progressing through pathology, diagnostic procedures, therapeutic interventions, and pharmacology. Students learn concepts, terms, and abbreviations for each topic. Students interested in medical careers may take this class in conjunction with Introduction to Health and Medical Science for a complete sequence. The course includes an examination that confers certification from a recognized industry, trade, or professional association or a professional license from the Commonwealth of Virginia.

Introduction to Athletic Training (9840)

Grade Level(s): 11-12 Credit: 1 unit

This course introduces the student to the field of athletic training. The course will provide a basic knowledge of anatomy, dermatology, and neurology. The student will be introduced to information on specific injuries and the prevention, assessment, and rehabilitation of those injuries. Taping techniques, the use of several therapeutic modalities, basic first aid, and CPR skills will be taught and reinforced.

Athletic Training II (9841)

Grade Level 12 Credit: 1 unit

Students will build upon previous knowledge related to anatomy and sports injuries. In this course, students will learn about prevention and rehabilitation of sports injuries and explore alternative medicine.

Advance Placement Psychology (2902)

Grade Level: 11-12 5.0 Weighted Grading Scale Credit: 1 unit

AP Psychology is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods

psychologists use in their science and practice. Students are expected to take the AP exam in Psychology.

Pre-AP Geometry (3154) SOL TEST

Grade Level(s): 9-10 4.5 weighted grading scale Credit: 1 unit

This course is designed for advanced students who are capable of more rigorous study at an accelerated pace and to help students succeed in college and rigorous high school courses such as those offered by the Advanced Placement program. The Standards of Learning (SOL) objectives for Geometry, plus SOL objectives T1-4 and T9 for Trigonometry-A One Semester Course will be covered. The trigonometry portion of the course will emphasize degree measure of angles and geometric applications such as the laws of sines and cosines. Graphing calculators will be used to enhance learning; however, the students' use of a calculator will be limited. Opportunities to demonstrate conceptual understanding, in addition to mastery of basic skills, will be provided throughout the course. The SOL test for geometry will be given at the end of the course.

Pre-AP Algebra II (3139) SOL TEST

Grade Level(s): 9-11 4.5 weighted grading scale Credit: 1 unit

This course is designed for advanced students who are capable of more rigorous study at an accelerated pace and is designed to help students succeed in college and rigorous high school courses such as those offered by the Advanced Placement program. The Standards of Learning (SOL) objectives for Algebra II, plus SOL objectives T3, and T5-8 for Trigonometry-A One Semester Course will be covered. The trigonometry portion of this course will emphasize radian measure and algebraic applications such as trigonometric functions, verification of identities and solution of trig equations. Students will be expected to demonstrate mastery of most algebra and trigonometry skills without the use of a calculator. However, graphing calculators will be used to assist in teaching and learning, and students will become proficient in a variety of graphing calculator skills. Opportunities to demonstrate conceptual understanding, in addition to mastery of basic skills, will be provided throughout the course. The SOL test for Algebra II will be given at the end of the course.

Pre-AP Mathematical Analysis/Pre-calculus (3162)

Grade Level(s): 10-12 4.5 Weighted Grading Scale Credit: 1 unit

Similar to College Pre-Calculus, this course continues the study of elementary trigonometric and analytic geometry. Mathematical concepts dealing with the analysis of elementary algebraic and transcendental functions are studied, focusing on sketching, limits, continuity, and solutions. Topics studied are value systems, functions and

relations, algebraic and transcendental analysis of conics, trigonometry, exponential and logarithmic functions, rate of change, sequence and series, permutation and combination, and mathematical induction. This course is designed for students planning to take AP Calculus and mathematics courses beyond that level in high school or college.

College Pre-Calculus I and II (3198) DUAL ENROLLMENT

Grade Level(s): 10-12 5.0 Weighted Grading Scale Credit: 1 high school and 6 college

Prerequisites: CVCC Screening Test

This is a dual enrollment course which incorporates CVCC courses Math 163 (first semester) and Math 164 (second semester). Pre-calculus I presents college algebra matrices, and algebraic, exponential, and logarithmic functions. Pre-calculus II presents trigonometry, and analytic geometry, and sequences and series. This course is designed for students planning to take AP Calculus and mathematics courses beyond that level in high school or college. CVCC regulations stipulate that students receiving a D or F in Math 163 (first semester) may not register for Math 164 (second semester).

Advanced Placement Calculus B/C (3179)

Grade Level(s): 11-12 5.0 Weighted Grading Scale Credit: 1 unit

This course is designed to include all topics covered in Calculus AB plus additional topics which will include: parametric, polar, and vector functions; applications of integrals, improper integrals; and polynomial approximations and series, specifically, concept of series, series of constants, and the Taylor series. The content of this course is designed to qualify the student, who is oriented toward mathematics, science, and/or engineering, for placement and credit in a college course that is one course beyond that which is granted for Calculus AB. Students who enroll in this course should have completed four years of secondary mathematics including coursework in algebra, geometry, trigonometry, analytical geometry, and elementary functions. These functions include those that are linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and piecewise defined. Students must understand the language of functions (domain and range, zeros, symmetry, periodic, even and odd, intercepts, and so on) and know the values of the trigonometric functions of the numbers 0 , $\pi/6$, $\pi/4$, $\pi/3$, $\pi/2$, and their multiples. The use of a graphing calculator in AP Calculus is considered an integral part of the course. Students are expected to take the Advanced Placement examination for college credit.

Advanced Placement Statistics (3192)

Grade Level: 11-12 5.0 Weighted Grading Scale Credit: 1 unit

Advanced Placement Statistics is designed to introduce the student to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. It is recommended for students who have a strong background in high school mathematics through Math Analysis. The course has broad applications in many areas of college study including the natural and social sciences, education, and business. Topics covered include 1) exploring data by describing patterns and departures from patterns, 2) sampling and experimentation, 3) anticipating patterns by using probability and stimulation and 4) statistical inference. Students are expected to take the AP Statistics test.

Pre-AP Biology (4330) SOL TEST

Grade Level(s): 9-11 4.5 Weighted Grading Scale Credit: 1 unit

Pre-AP Biology is an elective course in preparation for AP Biology. It is designed to guide students in the investigation of all aspects of living organisms and prepare students for the Advanced Placement Biology course. Extensive studies will include the following topics: ecology, cell structure, plant and animal systems, genetics, classification, and plant/animal evolution. There will also be an examination of how various plants and animals fit into the web of life. The SOL test for Biology is given in the course.

Advanced Placement Biology (4340)

Grade Level(s): 10-12 5.0 Weighted Grading Scale Credit: 1 unit

AP Biology is an elective course which follows the recommended College Board Course Outline and is designed to be the equivalent of a two-semester college introductory biology course usually taken by biology majors during their first year. This course is designed to help students develop a conceptual framework for modern biology and an appreciation of science as a process. Personal experience in scientific inquiry, recognition of unifying themes that integrate the major topics of biology and application of biological knowledge and critical thinking to environmental and social concerns are addressed. Students are expected to take the AP Biology test.

Pre-AP Chemistry (4430) SOL TEST

Grade Level(s): 10-12 4.5 Weighted Grading Scale Credit: 1 unit

This course is specifically designed to be a preparatory course for AP Chemistry and possibly other AP science courses. The course covers all content that is taught in Chemistry, but to a greater depth and level of understanding. Scientific methodology will be employed in experimental and analytical investigations and concept application. Technology including graphing calculators, computers, and probeware may be used.

Students will understand and use correct techniques and procedures with respect to safe use of chemicals and equipment. Additional topics which may be covered in this course include: nuclear chemistry, VSEPR theory, thermochemical and thermodynamic calculations, organic chemistry, electrochemistry, and qualitative analysis. The SOL test for Chemistry is given in the course.

Advanced Placement Chemistry (4470)

Grade(s): 11-12 5.0 Weighted Grading Scale Credit: 1 unit

AP Chemistry is an elective course which follows the recommended College Board Course Outline and is designed to be the equivalent of the general chemistry course usually taken during the first college year. Students in this course should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course should contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. Students are expected to take the AP Chemistry test.

Introduction to Anatomy and Physiology (4621)

Grade Level(s): 10-12 Credit: 1 unit

Introduction to Anatomy and Physiology, an elective course, provides a general introduction to the systems of the human body and their functions. It is designed to provide a foundation for students wishing to pursue the study of medicine or other related fields. Dissection is an integral part of the study.

Building Management I and II (8590, 8591)

Grade Level(s): 10-12 Credit: 3 units yearly

Location: BSTC

In the first two years of the program, emphasis is placed on the development of skills in various building and grounds custodial duties that include the following: care and use of interior cleaning equipment and materials, general building maintenance and repair, and grounds maintenance. Special emphasis is given to the development of proper work attitudes and pride in work performed. In the third year of the program, the student may be placed in an on-the-job training experience in the community, which is coordinated by the work-study coordinator.

Career Internship (9828)

Grade Level: 12 Credit: 1 unit

Career Internship combines a weekly internship at a local business/industry aligned with students' career interests and classroom instruction designed to equip them with skills critical for success in the workplace. This course provides senior students an opportunity to practically apply their academics and further develop workplace skills in preparation for successful transition into postsecondary and career experiences. This course includes an examination (Virginia's Workplace Readiness Skills for the Commonwealth) that confers certification from a recognized industry, trade, or professional association or a professional license from the Commonwealth of Virginia.

Description of how/where courses will be delivered:

Governor's Health Sciences Academy students may take courses toward graduation/certification at one or more of the following locations: Staunton River/ Liberty/ Jefferson Forest High Schools (core content and CTE dual enrollment and Advanced Placement courses), Bedford Science and Technology Center, XLR8 STEM Academy, and Central Virginia Community College. Blended, personalized learning courses will be additional options for students.

Designation of full-day or part-day, academic-year program:

The Academy will serve students for part of their academic day. Students enrolled in the Academy will complete work for their academic and related elective courses either at their base high school or on the CVCC campus through the Early College program. During their 10th-, 11th-, and 12th-grade years, students will participate in courses in the Academy to increase their competitiveness in employment and postsecondary opportunities within the Region 2000 and Western Virginia communities. All students will have the opportunity to participate in at least one clinical, job shadowing, industry tour, or internship experience related to their career plans.

Evidence of participation in the Governor's Exemplary Standards Award Program for Career and Technical Education

Bedford County Schools' Governor's Health Sciences Academy will strive for excellence through provision of a rigorous, relevant, career-oriented program by following the standards outlined in the Governor's Exemplary Standards Award Program for Career and Technical Education. Staff will review program standards and collect evidence support each. Data will be presented to the Advisory Board with a plan developed to meet goals and objectives of the program by the 2015-16 school year.

Program and Course Descriptions

The proposed Bedford County Governor's Health Sciences Academy is anticipated to offer clearly articulated programs within the Therapeutic Services and Biotechnology Research and Development career pathways during the 2014-15 school year. Programs within the other three pathways will be initiated over the next three years of operation. Upon completion of each pathway, students will earn a combination of industry credentials, Advanced Studies Diploma, postsecondary career certificates, and/or an associate degree. Students' individual career plans will specifically outline coursework that is directly tied to their educational and career goals. Through the rigor and experiential knowledge gained in Academy programs, students will be prepared to complete the coursework necessary to obtain additional degrees at all levels of postsecondary education. Assessment of general career preparation will be administered in each program through certification in *Virginia's Workplace Readiness Skills for the Commonwealth*.

The proposed health science career pathways were selected to meet industry need identified in the state of Virginia and local community. Bedford County, nestled between Roanoke and Lynchburg, serves as a bedroom community to these two metropolitan areas. While enjoying the rural community of Bedford, a large majority of our population travels to the Roanoke and Lynchburg areas for work. Data obtained from the Local Workforce Investment Board for Virginia identifies many of these careers as high-demand, strategic growth occupations for Virginia and our locality. Occupational employment data collected by the University of Virginia's Weldon Cooper Center for both the Bedford area (referred to as "Region 2000", which includes Amherst, Appomattox, Bedford, Campbell, and Lynchburg) and adjacent areas (referred to as "Western Virginia", which includes Alleghany, Botetourt, Clifton Forge, Craig, Franklin, Roanoke, Roanoke City) supports these findings. There are approximately 6,952 current jobs in health-care professions in Region 2000, with an anticipated increase of 25 percent up to 8,712 expected by 2020 (see Appendix F for specific career data for this region). In addition, in the Western Virginia region there are currently 15,933 jobs in health care with an anticipated 18 percent growth rate, increasing this number to 18,819 jobs by 2020 (see Appendix G for specific career data for this region).

Particular growth is anticipated in the careers of dental hygienist (38 percent Region 2000; 37 percent Western Virginia), emergency medical technician (37 percent Western Virginia), certified nursing assistant (22 percent Western Virginia; 30 percent Region 2000), radiology technician (26 percent Region 2000), medical laboratory technician (27 percent Western Virginia) and licensed practical nurse (20 percent Region 2000). Add to these numbers an aging work force in our region. The Virginia Health Chart Book reports the average age of registered nurses in Bedford City to be 50-59 years and the average age of Registered Nurses in Roanoke County, Lynchburg,

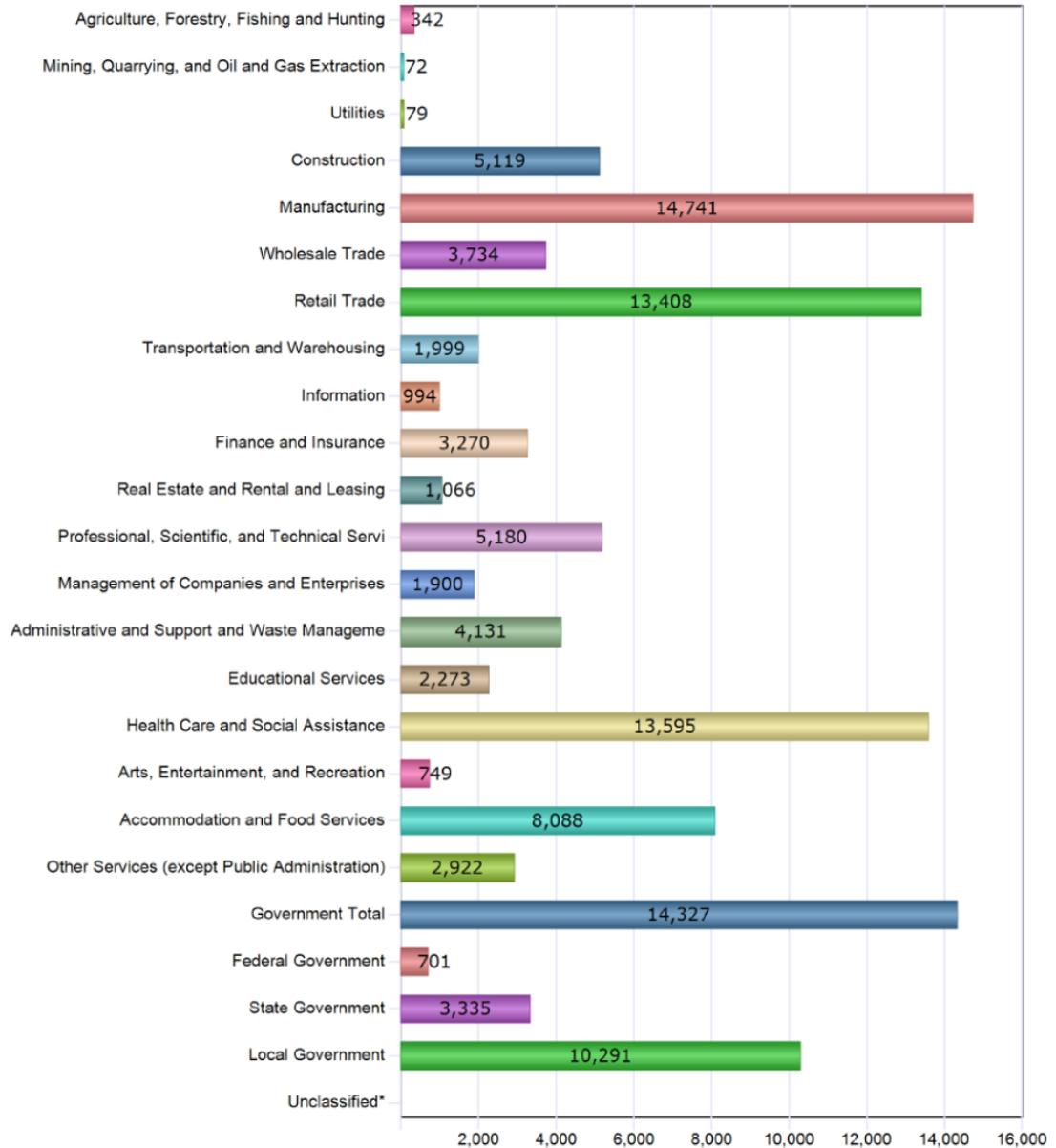
Botetourt, and Franklin County as 40-49. Strategic educational and career planning for our youth is needed to meet these demands in our community.

50 Largest Employers

- | | |
|---|---------------------------------------|
| 1. Centra Health | 26. Sodexo |
| 2. Babcock & Wilcox Nuclear | 27. Nationwide Mutual Insurance |
| 3. Bedford County School Board | 28. Appomattox County Schools |
| 4. Lynchburg City Schools | 29. R.R. Donnelley Printing |
| 5. Wal Mart | 30. Carilion Professional Services |
| 6. Areva NP Inc. | 31. Campbell County |
| 7. J. Crew Outfitters | 32. Westminster Canterbury |
| 8. Campbell County Schools | 33. Lowes' Home Centers, Inc. |
| 9. City of Lynchburg | 34. Frito Lay Inc |
| 10. Central Virginia Training Center | 35. Mail America Communications |
| 11. GNA Corporation | 36. Sweet Briar College |
| 12. Amherst County School Board | 37. VDOT |
| 13. Food Lion | 38. Young Men's Christian Association |
| 14. Kroger | 39. Staffmark Investment LLC |
| 15. Lynchburg College | 40. Air & Liquid Systems Corp |
| 16. Central Virginia Community Services | 41. C.B. Fleet, Inc. |
| 17. Harris Corporation | 42. GP Big Island LLC |
| 18. Abbott Laboratories | 43. Randolph-Macon Women's College |
| 19. County of Bedford | 44. Bedford County Adult Detention |
| 20. Barr Laboratories Inc | 45. Delta Star |
| 21. BGF Industries Inc. | 46. Elwood Staffing Services Inc |
| 22. Tri Tech Laboratories Inc | 47. Glad Manufacturing Company |
| 23. Central Virginia Community College | 48. Residential Care |
| 24. Southern Air Inc. | 49. Warsaw Health Care Center |
| 25. Postal Service | 50. Startek |

Source: Virginia Employment Commission, Quarterly Census of Employment and Wages (QCEW), 4th Quarter (October, November, December) 2011.

Employment by Industry



Total: 97,988

Note: Asterisk (*) indicates non-disclosable data.

Source: Virginia Employment Commission, Quarterly Census of Employment and Wages (QCEW), 4th Quarter (October, November, December) 2011.

Although Bioscience was not included as a healthcare pathway as identified in the data obtained from the University of Virginia’s Weldon Cooper Center, the following information was obtained through the Virginia Employment Commission and the Bureau of Labor Statistics:

State and National Trends

State and National Employment Trends for Biochemists/Biophysicists				
	Employment		Change	Job Openings ¹
	2012	2022		
United States	29,200	34,600	+19 percent	13,700
Virginia	420	610	+43 percent	30

¹Job Openings refers to the average annual job openings due to growth and net replacement.

Note: The data for the State Employment Trends and the National Employment Trends are not directly comparable. The projections period for state data is 2010-2020, while the projections period for national data is 2012-2022.

Sources: [Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections, Virginia Employment Commission](#)

The Bedford County Governor’s Health Sciences Academy proposes to offer students courses (on our division high school campuses, Bedford Science and Technology Center, and Central Virginia Community College) related to healthcare career pathways (planned courses italicized):

Biotechnology Research and Development

- Bioengineering (8467)
- Biomedical Technician (8347)
- Biotechnology Foundations (9050)
- *Human Body Systems (PLTW)(8380)*
- *Medical Interventions (PLTW)(8381)*
- *Medical Laboratory Technology I (8377)*
- *Medical Laboratory Technology II (8378)*
- *Principles of Biomedical Sciences (PLTW)(8379)*

Diagnostic Services

- Biomedical Technician (8347)
- Biomedical Foundations (9050)
- Introduction to Health and Medical Sciences (8302)
- *Medical Interventions (PLTW)(8381)*
- *Medical Laboratory Technology I (8377)*
- *Medical Laboratory Technology II (8378)*
- Medical Terminology (8383)

- *Principles of the Biomedical Sciences (PLTW)(8379)*

Health Informatics

- Bioengineering (8467)
- Biomedical Technician (8347)
- Biotechnology Foundations (9050)
- Introduction to Health and Medical Sciences (8302)
- *Medical Interventions (PLTW)(8381)*
- *Medical Laboratory Technology I (8377)*
- *Medical Laboratory Technology II (8378)*
- Medical Terminology (8383)

Support Services

- Bioengineering (8467)
- Biomedical Technician (8347)
- Biotechnology Foundations (9050)
- *Medical Interventions (PLTW)(8381)*
- Medical Terminology (8383)
- *Principles of the Biomedical Sciences (PLTW)(8379)*

Therapeutic Services

- Bioengineering (8467)
- Biomedical Technician (8347)
- Emergency Medical Technician I (8333)
- Emergency Medical Technician II (8334)
- *Human Body Systems (PLTW)(8380)*
- Introduction to Health and Medical Sciences (8302)
- *Medical Interventions (PLTW)(8381)*
- *Medical Laboratory Technology I (8377)*
- *Medical Laboratory Technology II (8378)*
- Medical Terminology (8383)
- Nurse Aide I (8360)
- Nurse Aide II (8362)
- Practical Nursing I (8357)
- Practical Nursing II (8358)
- *Principles of the Biomedical Sciences (PLTW)(8379)*

Requirements and Benchmarks for Program Completion

Upon program completion, students will have earned a Standard Diploma or Advanced Studies Diploma. In addition, each will also have obtained one or more industry certifications and/or state occupational licenses, and/or demonstrated such competencies on an assessment instrument recognized by postsecondary institutions. Students will also have the opportunity to earn at least nine transferrable college credits through a combination of Advanced Placement and dual enrollment options. All Academy students will produce an educational/employment portfolio designating awards, accomplishments, competencies, service hours, letters of recommendation, and industry credentials.

Work-based experience

Bedford County Public Schools has made a divisionwide commitment to provide students with work-based opportunities prior to graduation. As part of our strategic plan, division leaders have implemented as a goal that by the end of fiscal year 2018 all students will be required to complete an internship experience prior to graduation. We are currently investigating the community partnerships, supervision needs, transportation requirements, and financial support that will be needed to support this program. A current program to support attainment of this goal is in its third phase.

Students in all programs will have a variety of project-based and service learning opportunities. These include:

Clinical experiences: Students in the LPN, CNA, and EMT programs will participate in clinical hours equivalent to those required by their respective regulatory boards. Students in the LPN program will continue to participate in clinical experiences through Centra at the Bedford Memorial Hospital location and other assigned sites. Nurse Aide students will complete clinical rotations under appropriate staff supervision at the Bedford County Nursing Home and Oakwood Health and Rehabilitation Center while EMT students will complete their required hours in the Bedford Memorial Hospital Emergency Room and with the Bedford Fire and Rescue Department.

Classroom Guest Speakers: Instructors in each program invite appropriate leaders from the field to enhance the students' educational experience, increase community awareness of our programs, and provide a unique career prospective to our students.

Field Trips and Tours: Students will have the opportunity to participate in off-site educational opportunities within the healthcare field including the Centra Simulation Lab, area hospitals/clinics, and personalized job shadowing experiences.

Bedford County Fire-Rescue Explorer Post: Students interested in the healthcare occupations will be invited to participate in a newly formed Explorer Post targeted to develop leadership, life skills, citizenship, and character skills while providing career exploration opportunities.

Health Occupations Students of America: Bedford Science and Technology Center has an active chapter in the national student organization whose mission is to promote career opportunities in the healthcare industry and to enhance the delivery of quality health care to all people. Students participate at the local, regional state, and national levels.

Centra Summer Camp is a free camp offered to sophomore applicants interested in careers in the healthcare industry at the Centra Lynchburg General Hospital of Nursing. This weeklong experience provides a mentored experience for campers and focuses on healthcare careers at Centra, including: nursing, physical therapy, occupational therapy, speech therapy, pharmacy, radiology, respiratory, laboratory, emergency department, flight services, and the operating room.

Community Health Fairs: Students in each program will participate in opportunities for service learning by assisting with school and community health fairs.

College and Career Fairs: Students and parents will be invited to an annual college and career fair evening in which they will have the opportunity to speak with representatives from local employers and institutes of higher education regarding student opportunities in the community.

Academy Daily Schedule

The Academy will serve students for part of their school day. Students will generally take core content/AP courses at their base high schools and participate in Academy coursework in either the morning or afternoon sessions at Bedford Science and Technology Center (according to the bell schedule in Appendix H). Specific courses will meet as designated:

- Morning: Nurse Aide, Medical Terminology (A day), Introduction to Health and Medical Sciences (B days), Medical Lab Tech II
- Afternoon: Emergency Medical Technician, Practical Nursing I, Medical Lab Tech I

Practical nursing students in the second year of their program will meet at Bedford Memorial Hospital for clinical hours in the morning and classroom instruction in the afternoon. Biotechnology students attending XLR8 will attend the CVCC Lynchburg campus during the morning, taking career related technical, mathematics , and science

courses with English, foreign language, and social science courses completed at their base high school or CVCC as appropriate. Students attending the Early College program will attend CVCC during the first half of the school day, with career technical courses taken in the afternoon at Bedford Science and Technology Center.

Assurance from the fiscal agent

Bedford County Public Schools Superintendent Dr. Doug Schuch has signed the statement of assurances on behalf of the Governor's Health Sciences Academy stipulating that the Bedford County Governor's Health Sciences Academy Advisory/Planning Committee has reviewed the provisions of Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academies and agrees to follow the guidelines set forth in the document (See Appendix I- Statement of Assurances).

Materials and Equipment to be provided to accomplish goals and objectives

Initial grant funds will be used to promote the Governor's Health Sciences Academy within the community and fund the purchase of startup equipment for new programs in each pathway. Additional financial support will be leveraged through local school division instructional funds, contributions from local industry partners, and the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV).

State and federal purchasing guidelines will be followed for the purchase of equipment using these funds with items selected from the state-approved equipment list for career and technical education programs. In addition, equipment purchased through the Perkins grant will meet applicable grant regulations.

Description of proposed program evaluation

The director of instruction, career and technical education supervisor and administrator of the Bedford Science and Technology Center will serve as the governing board of the Governor's Health Sciences Academy. The Planning and Advisory Committee will review the Academy's policies and procedures, lending their knowledge and expertise in the design and evaluation of program outcomes. This committee, comprised of administration, staff, parents, members of the healthcare industry, higher education entities, and county offices of work force and economic development, will facilitate, coordinate, and monitor program effectiveness in meeting the individual career goals of students and the needs of the healthcare community. Student feedback will be gathered through post-graduation surveys. Data from the Bedford County CTE Annual Performance Report, school attendance and disciplinary records, student performance on standardized tests, and certification/licensure examination will be evaluated by

Academy administration and staff and reported to the advisory committee. Program adjustments and improvements will be based on analysis of this data.

IV. Administrative procedures

Partnerships

Strong, meaningful partnerships will be fostered and maintained by the Academy administration, staff, and the community through representation by division administrative and instructional staff, institutions of higher education, and business and industry through the planning/advisory committee. This board will serve the following roles:

1. Forge ongoing active partnerships among local hospitals and healthcare agencies, Central Virginia Community College, Centra and its affiliates, local biotechnical partners, the Office of Economic Development, Bedford County Chamber of Commerce, and Bedford County Public Schools.
2. Establish and deliver challenging career and technical education that prepares students for the rigor and demand of higher education and employment in high-demand healthcare professions.
3. Provide guidance and input in the development and implementation of student academic and career plans within each of the five pathways in health sciences.
4. Plan, participate, and promote activities and programs of the Academy.
5. Assist in the identification of opportunities for additional community partnerships.
6. Provide information/opportunities for job shadowing, internships, summer programs, site visits, guest speakers, and/or clinical activities for students.
7. Identify employment needs and opportunities within the healthcare industry in our region of Virginia.

In addition, Bedford Science and Technology Center and the Governor's Health Sciences Academy will work collaboratively with the administration and counseling departments of division middle and high schools to align students' educational plans of study to their career plans. It is our objective to provide parents and students with clear and structured pathways to meet each student's individual goals. Through program promotion we hope to increase awareness among our stakeholders and the community to expand opportunities available to our youth interested in the health sciences field.

Student recruitment, selection criteria, and admissions

Students identified as candidates for participation in the Governor's Health Sciences Academy through career interest surveys administered in the eighth grade will be invited with their parents to attend an Academy informational session. Here, families will be provided with an explanation of each of the pathways and its associated programs

(Appendix J). Higher education requirements and opportunities will be presented at this meeting to allow each student to make informed decisions regarding personal plans of study. Student applications will be submitted to the Academy through division high school counseling departments. The application process will include demographic information, attendance data, academic record, discipline records, and letters of recommendation. Students applying for the Practical Nurse program will also complete interviews and participate in Test of Essential Academic Skills (TEAS) testing. Applications will be reviewed by a team utilizing a rubric to rank candidates for acceptance into each program (Appendix K). Bedford County Public Schools does not discriminate on the basis of race, color, national origin, sex or disability in its programs, activities or employment practices, as required by Title VI, Title VII, Title IX, and Section 504.

Code of student conduct and attendance

The Bedford County Governor's Health Sciences Academy's student discipline, attendance, and safety/security policies will directly follow those policies and procedures established by the Bedford County School Board Code of Student Conduct (<http://bedford.sharpschool.net/cms/One.aspx?portalId=1057261andpageId=2177299>).

Transportation

Transportation will be provided by Bedford County Public Schools' Department of Transportation in compliance with applicable federal and state regulations. Students within each zone will be provided with bus transportation to each of the three base schools, with buses then transporting students to and from Bedford Science and Technology Center, CVCC Bedford campus, and CVCC Lynchburg campus (including XLR8 program).

Staff recruitment, selection, and assignment

The Bedford County Governor's Health Sciences Academy shall hire staff members who meet the Virginia teacher licensure requirements and/or postsecondary faculty qualifications. Instructional staff will possess industry-specific education and experience including industry certification. Staff will maintain current industry certification in addition to content specific Virginia teaching licensure.

Staff Development

Bedford County Public Schools supports and encourages instructors in continued lifelong learning and professional development. Teachers are provided with opportunities to participate in staff development at the school and division levels. Division instructional technology resource teachers (ITRT) are available to provide

assistance in the integration of technology into the curriculum and in the use of current instructional technology to facilitate student learning. In addition, individual teachers are encouraged to seek graduate level opportunities through division Tuition Assistance funds, which are available to reimburse the costs associated with courses taken through local universities. The Bedford County Health Sciences Academy will provide common planning time for instructors within each program. In addition, monthly instructional meetings will address common staff development needs identified by the Academy faculty.

Staff Evaluation

Instructional staff will be evaluated according to the policies and procedures set forth by the Bedford County School Board. Bedford County Public Schools' supervision of teachers incorporates a process for collecting and presenting data to document performance that is based on well-defined job expectations.

The Bedford County Public Schools' teacher evaluation system provides a balance between professional structure and flexibility. That is, it is prescriptive in that it defines common purposes and expectations, thereby guiding effective practice. At the same time, it provides flexibility, thereby allowing for creativity and individual initiative. The goal is to support the continuous growth and development of each teacher by monitoring, analyzing, and applying pertinent data compiled within a system of meaningful feedback. Specific information is available from the Teacher Performance Evaluation Handbook, accessible on the division Web site at <http://bedford.sharpschool.net/cms/One.aspx?portalId=1057261andpageId=1679056> .

Parent, student and community involvement

Following completion of career interest inventories in the eighth grade, middle school counselors will begin to work with students to prepare them to enter the Health Sciences Academy. Students will develop academic and career plans of study which will outline core content and career and technical coursework needed to meet each student's individual goals. Parents will be active participants in the preparation of this living document. Through informational sessions, families will be presented with an outline of available courses of study in high school leading to postsecondary pathways in our region, the steps needed to reach these pathways, and financial considerations and opportunities. In addition, at these sessions, staff and counselors will discuss available diploma requirements, diploma seals, certification/licensing exams, dual enrollment and AP options, and admission to the Governor's STEM Academy Biotechnology program. As students enter high school, they will be able to learn about the courses and career opportunities available through the Academy by participating in school-based college and career fairs, grade level assemblies led by Bedford Science

and Technology staff, and tours of the Academy facility. Parents will be sent information regarding participation of their children in the Health Sciences Academy and invited to attend the parent/community open house on the campus of Bedford Science and Technology Center. Review of student career plans will occur at least annually to address changes in student interests, goals and resources.

V. Documentation of insurance, budget, and other fiscal information

Budget Narrative

A. Personnel (\$264,870):

Administrator: currently manages, facility, programs, credentialing assessments, curriculum, staff, and students of Bedford Science and Technology Center. (20 percent FTE \$12,870)

Director, School of Nursing: oversees administrative needs related to the Practical Nursing program (FTE \$56,000)

Faculty: responsible for the administration of the curriculum to instruct Academy students (4.5 FTE \$180,000)

Support Staff: instructional assistant qualified to supervise Nurse Aid clinical experiences (FTE \$16,000)

B. Employment Benefits (\$20,262):

FICA benefits based on salaries noted above.

C. Staff Development (\$3,500):

Tuition Assistance Payment funds will be used to cover costs associated with Department of Education licensure requirements for staff on provisional endorsement (\$1,000). Two of four staff will attend summer Virginia Health and Medical Educators Association summer conference (travel, lodging, registration \$2,000). Instructional Technology Resource Teacher professional development will be provided four times annually for two hours (\$500 in kind).

D. Purchased/ Contractual Services (\$4,500):

Funds will be provided to cover expenses related to credentialing and/or licensure costs associated with high school program completers through Perkins funding. Local funds will be used to cover the division's

contribution to AP test fees with provisions for students receiving free and reduced lunch.

E. Materials/Supplies (\$11,500):

Initial grant allocation (\$2500) to be used for initial start-up costs including materials and supplies needed to promote and publicize new Health Sciences Academy programs to stakeholders and our community. Funds received from Bedford Health Foundation (\$9,000) will be used to update instructional video library and anatomical models.

F. Equipment (\$28,000):

Second allotment grant funds (\$6,000), local instructional funds (\$10,000), and state equipment funds (\$12,000) will be used to purchase needed equipment as new programs are developed in the remaining three health sciences pathways and current programs are updated to reflect STEM-H curriculum. 2014-15 Perkins funding will be sought following release of local allocations.

In-Kind

Twenty-four Advisory Board members will provide in-kind donation of their time at a rate of \$25 per hour for four quarterly meetings (\$2,400). In addition, guest speakers from these organizations (time and travel) are at a rate of \$100 per event (\$1,000). Summer camp participation is will be based on program acceptance (valued at \$500 per student for the week)(\$2,000). (See Appendix L--Budget)

(See Appendix M--Insurance)

APPENDICES

Appendix A
Advisory Board and
Planning Committee
Members

K-12 Education Planning/Advisory Committee Membership		
Organization	Member's Name	Contact Information
Bedford County Public Schools	Dr. Douglas Schuch, Superintendent	310 S. Bridge Street, Bedford, VA 24523 (540) 586-1045 dschuch@bedford.k12.va.us
Bedford County Public Schools	Dr. Mac Duis, Director of Instruction	310 S. Bridge Street, Bedford, VA 24523 (540) 586-1045 mduis@bedford.k12.va.us
Bedford County Public Schools	Dr. Fred Conner, Career & Technical Educational Supervisor	310 S. Bridge Street, Bedford, VA 24523 (540) 586-1045 fconner@bedford.k12.va.us
Bedford County Public Schools	Mr. Denver Drennen, Math/Science Supervisor	310 S. Bridge Street, Bedford, VA 24523 (540) 586-1045 ddrennen@bedford.k12.va.us
Bedford Science and Technology Center	Barbara Rezzonico, Administrator	600 Edmund St., Bedford, VA 24523 (540)586-3933 brezzonico@bedford.k12.va.us
Bedford Science and Technology Center	Mrs. Angela Beasley, Director Bedford School of Nursing	600 Edmund St., Bedford, VA 24523 (540)586-3933 abeasley@bedford.k12.va.us
Bedford Science and Technology Center	Mrs. Tara Smith, Instructor CNA Program	600 Edmund St., Bedford, VA 24523 (540)586-3933 tsmith@bedford.k12.va.us
Bedford Science and Technology Center	Ms. Jodi Shirey, Instructor EMT Program	600 Edmund St., Bedford, VA 24523 (540)586-3933 jshirey@bedford.k12.va.us
XLR8 Lynchburg Regional STEM Academy	Ms. Susan Cash, Director XLR8 STEM Academy	3506 Wards Rd Lynchburg, VA 24502 (434)-832-7731 cash.d@lynchburg.edu
Jefferson Forest High School/CVCC	Mrs. Susan Hogg, Career Coach	1 Cavalier Circle, Forest, VA 24551 (434)525-2674 shogg@bedford.k12.va.us
Liberty High School	Mr. Tim Overstreet, Principal	100 Liberty Minuteman Dr. Bedford, VA 24523 (540)586-2541 toverstreet@bedford.k12.va.us
Staunton River High School	Mrs. Maggie Mills, School Counselor	1095 Golden Eagle Dr., Moneta, VA 24121 (540)297-7151 mmills@bedford.k12.va.us
Bedford Middle School	Mrs. Leigh Thompson, Director of Guidance	503 Longwood Avenue, Bedford, VA 24523 (540)586-7735 lthompson@bedford.k12.va.us
Liberty High/ Staunton River/ CVCC	Mrs. Josselyn Gregory, Career Coach	1095 Golden Eagle Dr., Moneta, VA 24121 (540)297-7151 jgregory@bedford.k12.va.us

Higher Education Planning/Advisory Committee Membership		
Organization	Member's Name	Contact Information
Central Virginia Community College	Mr. William Sandidge, VP, Academic Affairs and Student Services	3506 Wards Road, Lynchburg, 24502 (434)-832-7600 SandidgeW@CVCC.VCCS.EDU
Central Virginia Community College	Dr. James Lemons, Dean Business and Allied Health	3506 Wards Road, Lynchburg, 24502 (434)-832-7600 LemonsJ@CVCC.VCCS.EDU
Central Virginia Community College	Dr. Jeff Laub, Dean Science, Math, and Engineering	1633 Venture Blvd. Bedford, VA 24523 (434)-832-7284 LaubJ@CVCC.VCCS/EDU
Liberty University	Deanna Britt, PhD, RN Chair Dept. Nursing	1971 University Boulevard Lynchburg, VA 24515 (434) 582-2000 Britt.D@liberty.edu

Business/ Industry Partners Planning/Advisory Committee Membership		
Organization	Member's Name	Contact Information
Bedford Memorial Hospital/Oakwood Health and Rehab Center	Mrs. Patti Jurkus, President	1613 Oakwood St., Bedford, VA 24523 (540)586-2441
Bedford Community Health Foundation	Denny Huff, Executive Director	321 North Bridge Street, Bedford, Virginia 24523 (540)-586-5292 ed@healthybedford.org
Bedford County Office of Economic Development	Traci Blido, Director	122 East Main Street, Suite 202, Bedford VA 24523 (540) 587-5670 tblido@bedfordcountyva.gov
Bedford County Chamber of Commerce	Susan Martin, President/CEO	305 East Main Street, Bedford, VA 24523 (540) 586-9401 susanmartin@bedfordareachamber.com
Bedford County Fire and Rescue	Janet Blankenship	1305 Falling Creek Rd, Bedford, VA 24523 (540)587-0700 j.blankenship@bedfordcountyva.gov

Appendix B

Advisory Board and Planning Committee Signed Agreements

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Douglas R. Schuch, Superintendent

Printed Name/ Title

Bedford County Public Schools

Name of Representative Organization

Douglas R Schuch

Signature

2/25/2014

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Mae Duis, Director of Instruction

Printed Name/ Title

Bedford County Public Schools

Name of Representative Organization



Signature

2/25/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

FRED CONNER / SUPERVISOR OF CTE

Printed Name/ Title

BEDFORD COUNTY PUBLIC SCHOOLS

Name of Representative Organization



Signature

2/25/2014

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Denver L. Drennon, Jr.
Supervisor of Math, Science, & Gifted

Printed Name/ Title

Bedford County Schools

Name of Representative Organization



Signature

2/25/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Barbara Pezzonico
Printed Name/ Title
BSTC
Name of Representative Organization

Barbara Pezzonico
Signature
2/3/14
Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Angela E Beasley, RN Director

Printed Name/ Title

Bedford Co. Public School

Name of Representative Organization

Angela E Beasley RN

Signature

2/27/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Tara M Spetin / instructor

Printed Name/ Title

BCPS

Name of Representative Organization

T. M. Spetin

Signature

2/28/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Jodi Shirley, Instructor

Printed Name/ Title

BCPS

Name of Representative Organization



Signature

2/28/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Susan Cash, XLR[®] Director

Printed Name/ Title

XLR[®] Stem Academy

Name of Representative Organization

[Handwritten Signature]

Signature

2/29/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Susan Hogg, Career Coach
Printed Name/ Title
Central VA. Community College
Name of Representative Organization

Susan Hogg
Signature
3/13/14
Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Tim Overstreet, Principal

Printed Name/ Title

Bedford County Public Schools
Liberty High School
Name of Representative Organization

Jim Overstreet

Signature

3/25/2014

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Margaret Mills, School Counselor

Printed Name/ Title

Staunton River High School

Name of Representative Organization

Margaret Mills

Signature

2/27/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Lisa "Leigh" Thompson
Director of School Counseling
Printed Name/ Title
Bedford Co. Public Schools

Name of Representative Organization

Leigh Thompson
Signature
3/10/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Jesselyn Gregory
Career Coach
Printed Name/ Title
Central Virginia Community
College
Name of Representative Organization

Jesselyn Gregory
Signature
3/14/14
Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

William M. Sandidge

Printed Name/ Title
VP, Academic Affairs
And Student Services

Name of Representative Organization
Central Virginia
Community College

William M. Sandidge

Signature
3 February, 2014

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

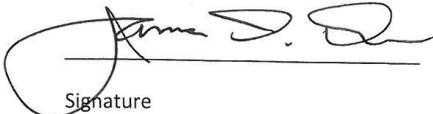
- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

JAMES L. LEMAKS, Ph.D. Dean

Printed Name/ Title

CENTRAL VA. COMMUNITY COLLEGE

Name of Representative Organization



Signature

2-3-14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Jeffrey W. Laub, Dean

Printed Name/ Title

Central Virginia Community College

Name of Representative Organization



Signature

2/3/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Deanna B. H., PhD, RN, Chair
Dept. of Nursing

Printed Name/ Title

Liberty University

Name of Representative Organization

Deanna Britt

Signature

3/27/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Patti O. Jurkus, CEO

Printed Name/ Title

Bedford Memorial Hospital

Name of Representative Organization

Patti O. Jurkus

Signature

3-10-14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Denny Huff, Exec. Director

Printed Name/ Title

Bedford Community Health
Foundation

Name of Representative Organization

Denny Huff

Signature

03/06/2014

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Traci Blido, Econ. Dev. Dir.

Printed Name/ Title

Bedford County Administration

Name of Representative Organization



Signature

3/10/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Susan Martin, President & CEO

Printed Name/ Title

Bedford Area Chamber of Commerce

Name of Representative Organization

Susan Martin

Signature

3/7/14

Date

Bedford County Public School
Governor's Health Sciences Academy
Planning/Advisory Committee Agreement

The authorized signature on this page certifies to the Virginia Department of Education a pledge to support the BCPS Governor's Health Sciences Academy through participation in the establishment, implementation, and ongoing development of this program of studies. As a member of the Planning/Advisory Committee, I agree to regularly participate by:

- Reviewing the provisions of the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* and following the guidelines set forth within this document
- Attending Planning and Advisory Committee meetings as scheduled by the division
- Providing guidance and input in the development and implementation of student career plans within each of the five pathways in health sciences: therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development
- Participating in Health and Medical Sciences activities and programs that further the goals of the Academy
- Assisting in the identification of opportunities for additional community partnerships
- Providing information/ opportunities for job shadowing, internships, summer programs, site visits, guest speakers and/or clinical activities for students
- Identifying employment needs and opportunities within the Healthcare Industry in our region of Virginia

Janet Blankenship
 Deputy Chief EMS Division
 Printed Name/ Title
Bedford County Fire & Rescue
 Name of Representative Organization

Janet Blankenship
 Signature
3/7/14
 Date

Appendix C

Clinical MOU

COMMONWEALTH OF VIRGINIA
CITY OF LYNCHBURG

CLINICAL LEARNING AGREEMENT

This Agreement is entered into the 13th day of January, 2014 between Bedford Science and Technology Center (hereinafter referred to as the (University/College/School) and Centra (hereinafter referred to as the Agency) to expire five years from the commencement date. This contract can be renewed for successive five-year terms upon written agreement of the parties. Either party may terminate this Agreement upon 60 days written notice to the other party. The Agency refers to all hospitals, facilities and services owned and operated by Centra.

The purpose of the Agreement is to establish a working relationship between the Agency and the University/College/School to provide clinical learning experiences for nursing and/or EMT and Paramedic students and enrich the program of the Agency through the stimulus of the relationship with the University/College/School and its students.

Clinical learning experiences are supervised clinical experiences leading to clinical hours to fulfill the clinical hour requirement for nursing (and other) education programs. The clinical settings may include acute, non-acute, community based, and long term care clinical settings; with experiences which may include adult medical/surgical nursing, geriatric nursing, maternal/infant (obstetrics, gynecology, neonatal) nursing, mental health/psychiatric nursing, nursing fundamentals, and pediatric nursing. Supervised clinical hours encompass the attainment and maintenance of physical and mental health and the prevention of illness for individuals and groups throughout the life cycle and in a variety of settings.

DEFINITIONS OF TERMS

Nursing Faculty is a Registered Nurse who teaches the practice of nursing in nursing education programs meeting the criteria as defined in Virginia Board of Nursing Regulations Governing the Practice of Nursing (18VAC90-20-90; 18VAC90-20-95; 18VAC90-20-96). Nursing faculty members maintain the ultimate responsibility for the student's learning in the clinical setting.

- A nursing faculty member who is not providing direct supervision may supervise the precepted clinical experiences, not to exceed a one to fifteen ratio (faculty/student).
- A nursing faculty member may directly supervise the students in the clinical area, not to exceed a one to ten ratio (faculty/student).

Clinical Preceptor is a licensed nurse (RN), licensed at or above the level for which the student is preparing. The clinical preceptor is a qualified licensed healthcare

professional employed by the facility in which the clinical experience occurs and is **present** with the student during the student's clinical experience. The clinical preceptor agrees to serve as a role model, resource person, and supervisor of the student's clinical experience. The preceptor-student ratio may not exceed two students to one preceptor at any given time, but may be one to one.

Nursing Student or Student is an individual enrolled in an approved nursing education program/Paramedic or EMT program. The nursing student may perform tasks that would constitute the practice of nursing. All students are responsible and accountable for the safe performance of those direct patient care tasks to which he has been assigned. The nursing student is self directed, responsible to and supervised by the nursing faculty member/clinical preceptor to achieve the clinical objectives of the specific course and nursing education program.

Preceptorship is a clinical experience in which a nursing student is participating in the provision of care for one or more clients and a nursing faculty member is not providing direct supervision on site. A preceptorship agreement is required when nursing faculty are not providing direct supervision.

I. DIRECT CARE CLINICAL COMPONENTS

- Nursing faculty member may directly supervise the students in the clinical area, not to exceed a one to ten ratio (faculty/student).
- Nursing faculty is on site solely to supervise students in the clinical setting.
- Supervising faculty mentors the student's clinical performance and intervene if necessary for the safety and protection of the patients.

Therefore in consideration of the purpose the Agency and the University/College/School agree as follows:

THE UNIVERSITY/COLLEGE/SCHOOL PROGRAM/FACULTY WILL:

1. Annually arrange for the attendance of one or more classes of nursing students or individual students at the Agency. A request for placement of students must be submitted for the next year by June 1 to the Agency's designee in the Professional Development Department.
2. Provide nursing faculty to supervise students in the Agency with a 1:10 ratio of faculty to students in accordance with the standards of the Virginia Board of Nursing and for the appropriate supervision of students in assigned clinical areas regardless of the hours of clinical assignment.
3. Have sole responsibility for administration and professional supervision of student for patient care.
4. Submit a schedule of students by name to the Unit Manager of the

appropriate area where students are to be assigned seven (7) days prior to the clinical practice date and provide the Manager with appropriate information relative to the achievement level of the nursing student in a pre-clinical conference. At this time, faculty orientation may be planned.

5. Require all nursing faculty to provide course information to the Unit Manager including the following:
 - a. Course description
 - b. Course objectives
 - c. Course schedule
 - d. Number of students
6. Assign students who have met academic requirements.
7. Assign students without regard to race, sex, national origin, and other protected statuses.
8. Designate an academic clinical coordinator to communicate with designee in Professional Development (PD) regarding clinical assignment needs. Individual faculty members and students should not contact Professional Development (PD) to request clinical space or clinical experiences.
9. Require each faculty member to complete an orientation program as designed by the Agency's designee in Professional Development (PD) and Unit Manager prior to acting in the capacity of clinical instructors. All instructors must complete at least an 8 hour orientation to department. Additional orientation is at the discretion of the Unit Manager or designee. All instructors must complete a competency self assessment prior to clinical orientation based on clinical competencies of the unit.
10. Require faculty to keep performance records and evaluate the students. (University/College/School will keep all records).
11. Require clinical instructors (faculty) to orient students to the clinical unit prior to making student clinical assignments. The University/College/School faculty shall complete on-line training including general orientation completion.
12. Provide written evaluations of clinical experiences by faculty and/or students to the unit manager and Professional Development at the end of each semester.
13. Be responsible for curriculum design.
14. Be responsible for promotion or dismissal of students.
15. Provide clinical education opportunities when possible.

16. Indemnify Agency from any and all claims, suits, actions, damages and costs, incurred or sustained as a result of the acts or omissions of or injuries to the University/College/School's employees or agents (including students and faculty) assigned to Agency.
17. Instruct students and faculty to follow Agency rules.
18. Assign students/faculty in good health or to the extent permitted by law and inform Agency of any special health problems. All clinical instructors should monitor students for any signs of illness and relieve them from clinical duties if any of the following symptoms are present:
 - a. A fever of 100.4 F or higher within the past 24 hours
 - b. Productive cough with fever
 - c. Sore throat with fever within the past 24 hours
 - d. Diarrhea within the past 24 hours
 - e. Vomiting within the past 24 hours
19. Require each student to report to employee health at Centra, unless other record keeping processes have been approved by Centra's Employee Health Dept, and provide the following or provide sufficient documentation in the student file at the college:
 1. Evidence of medical insurance
 2. Hepatitis B vaccination
 3. Documented proof of two MMR vaccines (or titers)
 4. Documented proof of Varicella protection (positive titer or two dates for the varivax vaccine)
 5. Current Tuberculin Skin Test. Employee health will administer the tuberculin skin test if needed.
 6. The student will complete a one-page health form upon arrival to employee health.
20. Assure that all students and faculty who participate in clinical training at the Agency and have the potential for exposure to blood and potentially infectious body fluids receive specific information and training about occupational exposure and appropriate protective measures prior to any assignment in the Agency. The University/College/School shall document training and make such documentation available to the Agency upon request for a period of three years.

THE AGENCY (CENTRA) WILL:

1. Provide clinical education experiences which meet the course objectives when possible. Potential clinical experiences will be dependent on patient volumes, types of patients, staffing, and at the discretion of the Unit Manager. Unit Managers may determine specific instructor/student ratios for student rotations based on patient population and knowledge and experience of instructor.

2. Designate an education coordinator. The liaison for the Agency is a designee in Professional Development.
3. Designate the Unit Manager or designee in each clinical area as the resource person for the University/College/School's nursing faculty.
4. Designate the Unit Manager, Professional Development and Chief Nursing Officer to render final decision regarding the number of students who can be accommodated, the scheduling of the students (days and hours), and the placement of students in each department in the Agency. The schedule for students shall be planned and in writing as agreed upon by the University/College/School and the Agency's designee.
5. Provide clinical experiences for traditional, non-traditional and RN-BSN nursing students, depending on course objectives.
6. Assist faculty and students in finding appropriate conference/meeting space when requested.
7. Permit students and faculty to eat in Hospital's cafeteria at the regular Hospital personnel with presentation of hospital badge.
8. Provide students with access to the library reference databases.
9. Ensure full control of student education by the faculty of the education program including the selection and supervision of learning experiences.
10. Ensure the education program is providing appropriate clinical supervision to the students, either by faculty or clinical preceptors, and is not relying on the cooperating agency staff to provide supervision of the students.
11. Provide participating students and faculty with access to first aid and emergency care for illnesses and incidents occurring on the Agency's property.

Health Insurance: Centra Health does not assume any responsibility for health care services provided to students or contracted consultants from outside organizations except under the following circumstances:

If a student or contracted consultant from an outside organization is injured during a patient-related incident while on the premises, Centra may assume responsibility for the cost of health care services with appropriate documentation of the incident.

II. **PRECEPTORSHIP COMPONENTS**

- Precepted clinical experiences are planned experiences for a specific nursing course.

- The nursing faculty member becomes the facilitator of the total preceptor experience by planning, counseling, periodic monitoring, and evaluating the preceptorship throughout its entirety.
- Nursing faculty members are responsible for the designation of a clinical preceptor for each student and will communicate such assignment with the clinical preceptor in collaboration with the clinical facility.
- When faculty are not on site to supervise students, clinical preceptors may be utilized for specific learning experiences in the clinical setting. During these times, the faculty member may supervise up to 15 students.
- Supervising preceptors shall monitor the student's clinical performance and intervene if necessary for the safety and protection of the patients.

Therefore, in consideration of the purposes, the Agency and the University/College/ School agree as follows:

THE UNIVERSITY/COLLEGE/SCHOOL AND PROGRAM/FACULTY RESPONSIBILITIES INCLUDE:

1. Students will not replace Agency staff and will provide service to clients under the supervision and direction of Agency staff.
2. Written objectives, methodology, and evaluation procedures for a specified period of time.
3. Provide clinical preceptor an orientation program for faculty, preceptors, and students.
4. Clinical preceptors will have an orientation to the philosophy, curriculum, course, and clinical objectives of the nursing education program and course. Discuss student expectations, skills performance, and methods of evaluation.
5. Allow for the performance of skills for which the student has had faculty-supervised clinical didactic preparation including applicable theory and clinical skills lab experiences necessary to safely provide care to clients, as appropriate.
6. Ensure student compliance with standards on immunization, screening, OSHA standards, CPR, and current liability insurance coverage, as appropriate.
7. Select clinical preceptor for nursing student.
8. Meet periodically with clinical preceptor and nursing student to determine student progress.
9. Be readily available via telephone for consultation when students are in the clinical area. The designated faculty member shall be available to provide assistance or supervision of the student at the clinical site should a problem arise

that cannot be resolved by telephone.

10. Ensure Student compliance with the Preceptorship Agreement and fulfillment of all Student responsibilities set-out herein.

THE AGENCY (CENTRA) RESPONSIBILITIES INCLUDE:

1. The number of precepted students per unit will be determined by the unit manager or designee.
2. Provide nursing preceptors for nursing student preceptorships. The ratio of preceptor to student shall be 1:1 or 1:2 in accordance with the Standards of the Virginia Board of Nursing.
3. Provide notification to University/College/School of changes in rules, policies, caseload, or staff, which affect the terms of this Agreement.
4. Retain ultimate responsibility for the care of patients.
5. Retain responsibility for the preceptor's salary, benefits and liability.
6. Arrange for the preceptor and nursing student to coordinate the times for the precepted clinical experience.

PRECEPTOR RESPONSIBILITIES:

1. Must participate in a preceptor orientation facilitated by the nursing education program.
2. Facilitate clinical learning experiences for no more than two nursing students at a time.
3. Orient nursing student(s) to the Centra, clinical area, and its policies and procedures.
4. Guide and supervise the student's performance of skills and other nursing activities to ensure patient safety.
5. Provide feedback to the nursing faculty member, assigned to the student, regarding clinical experience for student and suggestions for program development.
6. Provide the nursing student with feedback on his/her progress, based on the clinical preceptor's observations of clinical performance, assessment of achievement of clinical competencies, and patient care documentation.

7. Retain ultimate responsibilities for the care of the clients. Fulfill nursing duties as determined by the Centra's policies and procedures.
8. A preceptor may not further delegate the duties of the preceptorship.

STUDENT RESPONSIBILITIES:

1. Demonstrate self direction by actively seeking learning experiences and being prepared to accomplish the learning objectives for the clinical experience.
2. Maintain accountability for safe performance of those direct client care tasks to which the student has been assigned.
3. Prepare for each clinical experience as needed.
4. Provide safe nursing care at the highest level of the student's knowledge. Participate in direct client care as assigned by the clinical preceptor.
5. Respect the confidential nature of all information obtained during the clinical experience.
6. Contact nursing faculty by telephone if faculty assistance is necessary.
7. Maintain open communications with the preceptor and faculty.

III. COMMUNICATION CONCERNING STUDENT

Agency may temporarily suspend student in an emergency for what the Agency deems just cause while the Agency communicates in writing to the Academic Clinical Coordinator. Termination of the affiliation may be requested by Agency, University/College/School or student.

Agency can terminate student from affiliation with the Agency who is unable to provide appropriate care, who engaged in unprofessional, illegal, or unbecoming conduct, who engaged in conduct unbecoming or discreditive of the Agency or in violation of Agency policy, or whose state of health precludes working with patients. The Agency will notify the University/College/School immediately of any such termination.

IV. RELATIONSHIP OF PARTIES

Agency and University/College/School are independent contractors, and neither shall be nor have the authority to act as an agent for the other. This Agreement shall not, under any conditions, be construed as an agency agreement nor an agreement creating an agency relationship between Agency and University/College/School, or Agency and students/faculty. Agency shall not, in any way, be responsible for the acts of students/faculty in its program.

V. **LIABILITY INSURANCE**

The University/College/School shall maintain continuous professional malpractice liability insurance as follows:

All students and contracted consultants from outside organizations are responsible for providing their own malpractice liability insurance. Student liability insurance may be provided by the college or educational Agency which has the student affiliation agreement with Centra. Centra assumes no responsibility for malpractice liability insurance coverage for students or contracted consultants from outside organizations. It is the responsibility of the University/College/School to provide verification and validation of the following coverage for students:

On July 1, 2012, the cap on damages in a malpractice action rose to \$2,050,000. This amount will be increased each July by \$50,000.00 so that by the year 2032 the cap in VA will be \$3,000,000.00. This means that each year, students/schools must carry professional liability coverage as follows:

July 1, 2012	\$2,050,000
July 1, 2013	\$2,100,000
July 1, 2014	\$2,150,000
July 1, 2015	\$2,200,000
July 1, 2016	\$2,250,000
July 1, 2017	\$2,300,000
July 1, 2018	\$2,350,000
July 1, 2019	\$2,400,000
July 1, 2020	\$2,450,000
July 1, 2021	\$2,500,000
July 1, 2022	\$2,550,000
July 1, 2023	\$2,600,000
July 1, 2024	\$2,650,000
July 1, 2025	\$2,700,000
July 1, 2026	\$2,750,000
July 1, 2027	\$2,800,000
July 1, 2028	\$2,850,000
July 1, 2029	\$2,900,000
July 1, 2030	\$2,950,000
July 1, 2031	\$3,000,000

In an effort to provide adequate coverage in the event of such an action, Centra is requiring all providers to carry a minimum of per occurrence limits equal to or greater than the statutory cap in effect at any given time with an aggregate limit of \$6 million per year.

Any exceptions to this policy must be approved by Centra's legal counsel and/or Risk Management Director.

Note: This policy does not apply to the Centra Health Schools of Nursing which have their own policies and procedures related to health insurance and liability insurance requirements.

Each University/College/School, shall provide a certificate of insurance. Copies of all applicable certificates of insurance must be provided to the Agency's designee prior to permitting any student or faculty member to be present on the premises of the Agency. No student or faculty member will be permitted to participate in the program for whom evidence of adequate insurance is absent. The University/College/School will require those students assigned to the Agency to provide Agency with information on student's health insurance.

VI. GOVERNING LAW AND VENUE

This Agreement is made and entered into and shall be governed and construed in accordance with the laws of the Commonwealth of Virginia. All clinical learning experiences pursuant to this agreement will be conducted in a manner congruent with the provisions of the Virginia Nursing Practice Act and the Standards of the Commonwealth of Virginia's Board of Nursing. The sole and exclusive venue for any lawsuit arising out of or relating to this agreement shall be the Circuit Court of Lynchburg, Virginia.

VII. AMENDMENT

This Agreement may be amended at any time by written amendment signed by all of the parties hereto.

VIII. ASSIGNMENT

This Agreement shall not be assigned in whole or in part by either party hereto without the express written consent of the other party.

IX. INVALID AGREEMENT

In the event that any portion of the Agreement shall be determined to be invalid or unenforceable, the remainder of this Agreement shall be deemed to continue to be binding upon the parties hereto in the same manner as if the invalid or unenforceable provision were not a part of the Agreement.

X. NOTICE

Any notice required or allowed to be given hereunder shall be deemed to have been given upon deposit in the United States mail, registered or certified, with return receipt requested and addressed to the party to this Agreement to whom notice is given.

XI. BINDING AGREEMENT

This Agreement shall be binding upon the successors or assigns of the parties hereto.

XII. ENTIRE AGREEMENT

This Agreement constitutes the entire Agreement between the parties and contains all of the agreements between the parties with respect to the subject matter hereof and supersedes all other agreements either oral or in writing, between the parties hereto with respect to the subject matter hereof.

XIII. HEADING

All paragraph and item headings are inserted for convenience only.

XIV. COUNTERPART

This Agreement may be executed simultaneously by one or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as by law provided the day and year first above written.

CENTRA

BY: Ralanda L. Vick
DATE: 1/14/14

UNIVERSITY/COLLEGE/SCHOOL: BEDFORD COUNTY SCHOOLS

BY: Sammy Hight
DATE: 1/22/14

AMENDMENT TO AGREEMENT

This Amendment, effective as of September 23, 2013, is made between Bedford Memorial Hospital, trading as Oakwood Health and Rehabilitation Center and Bedford Adult Day Center ("Hospital") and Bedford County Public Schools, functioning through the Bedford Science and Technology Center ("BSTC").

WITNESSETH:

WHEREAS, the parties have previously entered into an Agreement Between Bedford County Public Schools and Bedford Memorial Hospital/Oakwood Manor Nursing Home/Bedford Adult Day Center for the Nurse Aide Program of Bedford Science and Technology Center, last revised November 12, 2009 (the "Agreement"), as thereafter amended by Addendum to Agreement entered into in September, 2012 (the "Addendum") (the Agreement and Addendum hereinafter collectively referred to as the "Agreement"); and

WHEREAS, the parties wish to extend the terms of the Agreement for an additional term of one (1) year beginning September 1, 2013.

NOW, THEREFORE, the parties hereby agree as follows:

1. The term of the Agreement shall hereby be extended for an additional one (1) year term beginning on September 1, 2013, and ending on August 31, 2014.
2. All other terms and conditions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have each caused their names to be subscribed unto this Amendment to Agreement by duly authorized officers, all as of the date and year first above written.

BEDFORD MEMORIAL HOSPITAL,
trading as Oakwood Health and
Rehabilitation Center and Bedford
Adult Day Center

BEDFORD COUNTY PUBLIC
SCHOOLS, functioning through
BEDFORD SCIENCE AND
TECHNOLOGY CENTER

By 
Its _____

By 
Its _____

AGREEMENT BETWEEN
BEDFORD COUNTY PUBLIC SCHOOLS AND BEDFORD COUNTY NURSING HOME FOR
THE NURSE AIDE PROGRAM OF BEDFORD SCIENCE AND TECHNOLOGY CENTER

AGREEMENT

This agreement between BEDFORD COUNTY PUBLIC SCHOOLS, functioning through Bedford Science & Technology Center, hereinafter referred to as "BSTC", and BEDFORD COUNTY NURSING HOME, hereinafter referred to as "Nursing Home", concerns policies and responsibilities governing the operation of the Nurse Aide Program.

THE PROGRAM

The program is conducted for the regular school term of one hundred eighty (180) days. As part of the program, each student shall participate each week for the period October through May. Students shall participate in a clinical experience including that within the Nursing Home three days per week for the period of October through May. The adult education program shall participate in a clinical experience including that within the Nursing Home at least two nights per week and possible Saturdays and/or Sundays for a period to be agreed upon by the parties hereto. General supervision of the program will be done by BSTC under the direction of the BSTC principal.

Student removal during the clinical phase of the program will be by mutual consent of both agencies after investigation by both parties.

RESPONSIBILITIES OF NURSING HOME

1. Provide the facility and exposure which will give the Nurse Aide student the opportunity to observe and participate in the care of patients.
2. Cooperate with the Bedford County Public School System in the various aspects of the Nurse Aide Program.
3. Retain responsibility for the patient.
4. Provide one (1) copy of Nursing Service Policies and Procedures to the instructor, particularly those pertaining to Nurse Aides.
5. In conjunction with BSTC, provide supervision of students during their clinical experience.

RESPONSIBILITIES OF BSTC

1. Provide instruction and preparation of the student for his/her clinical experience.
2. Provide student transportation to the clinical site.

3. Provide and retain ultimate supervision of students during the clinical experience subject to the Nursing Home's policies and procedures.
4. Formulate a rotation schedule for students according to their individual abilities subject to the approval of the Director of Nursing, Bedford County Nursing Home and the department heads of involved ancillary services.
5. Provide a list of skills which students have mastered.
6. Notify the appropriate staff person or ancillary department head as soon as possible if students are unable to come on a scheduled date.

RESPONSIBILITIES OF THE STUDENT

1. Students will abide by the policies and procedures of the Nursing Home when participating in the clinical experience within the Nursing Home.
2. Students are responsible for conforming to the proper dress code which includes an appropriate uniform, proper identification, and wrist watch with a sweep-second hand.

This Agreement may be modified or amended from time to time by mutual agreement of the parties, and such modifications or amendments shall be attached to and become a part of this agreement.

This Agreement may be terminated at any time by either party through provision of a twelve (12) month notice to the effect.

The signatures below signify the Agreement has been read and approved.

9/4/13
Date

Barb Rozome
Principal, Bedford Science & Technology Center

9/4/13
Date

Joni Pierce
Administrator, Bedford County Nursing Home

Appendix D

XLR8 Program of Study

XLR8 STEM Academy Course Reference Sheet

XLR8 Course (Junior Year)	Semester	CVCC Course number	CVCC Course Name	CVCC Credits	VDOE Course Number/Name
Introduction to Engineering Design (PLTW)	Fall	EGR 115 (3 credits) EGR 123 (2 Credits)	EGR 115-Engineering Graphics EGR 123- Introduction to Engineering Design	5	8349 Introduction to Engineering Design (PLTW)
Principles of Engineering (PLTW)	Spring	IND 160 (3 credits) EGR 120 (2 credits)	IND 160--Introduction to Robotics EGR 120-- Introduction to Engineering	5	8841 Principles of Engineering (PLTW)
Applied Technical Math 1	Fall	MTH 104	MTH 104- Applied Technical Math	3	3190 Probability & Statistics
Applied Technical Math 2	Spring	MTH 146	MTH 146- Elementary Statistics	3	3190 Probability & Statistics
Applied Chemistry for Engineers	Fall	CHM 101	College Chemistry	4	4410 Chemistry (if student has NOT taken Chemistry in HS) 4420 Chemistry 2 (if student HAS taken Chemistry in HS)
Applied Chemistry for Engineers	Spring	CHM 126	College Chemistry for Engineers	4	4410 Chemistry (if student has NOT taken Chemistry in HS) 4420 Chemistry 2 (if student HAS taken Chemistry in HS)
College Success Skills	Fall	SDV 100	College Success Skills	1	NONE
			TOTAL	25	

XLR8 STEM Academy Course Reference Sheet

XLR8 Course (Senior Year)	Semester	CVCC Course number	CVCC Course Name	CVCC Credits	VDOE Course Number/Name
Computer Integrated Manufacturing (PLTW)	Fall	IND 243 (3 credits) and IND 250 (2 credits)	IND 243 Principles and Applications of Mechatronics and IND 250-Introduction to Basic Computer Integrated Manufacturing	5	8442 Computer Integrated Manufacturing (PLTW)
Biotechnical Engineering (PLTW)	Fall	BIO 180 (1 credits) BIO 165 (2 credits) BIO 170 (2 credits)	BIO 180-Introduction to Careers in Biotechnology BIO 165-Principles in Regulatory and Quality Environments for Biotechnology BIO 170- Biotechnology Methods	5	8429 Biotechnical Engineering (PLTW)
Digital Electronics (PLTW)	Spring	ETR 121 (3 credits) ETR 123 (2 credits)	ETR 121 Electronic Devices 1 ETR 123 Electronics Applications 1	5	8440 Digital Electronics (PLTW)
Engineering Math 1	Fall	MTH 115	Technical Mathematics I	3	3160 Advanced Math
Engineering Math 2	Spring	MTH 116	Technical Mathematics II	3	3160 Advanced Math
Applied Physics	Fall	PHY 121	Principles of Physics I	4	4510 Physics
Applied Physics	Spring	PHY 122	Principles of Physics II	4	4510 Physics
Human Anatomy & Physiology 1	Fall	BIO 141	Human Anatomy and Physiology	4	4330 Biology 2-Anatomy & Physiology
Human Anatomy & Physiology 2	Spring	BIO 142	Human Anatomy and Physiology	4	4330 Biology 2-Anatomy & Physiology
Internship	Spring	EGR 190	Coordinated Internship	1	Mechatronics Specialty (8498 Tech Ed DE) Biotechnology Specialty (8394 Health & Medical Science DE)
TOTAL Biotech/Mechatronics				25	

Appendix E

Sample Plans of Study



Commonwealth of Virginia Plan of Study

Student Name: _____
School: Bedford County Schools
Date: 2014 -15 Implementation

Cluster: Health Science Pathway: Therapeutic Services

This Career Pathway Plan of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	GRADE	English/ Language Arts	Mathematics	Science	Social Studies/ Science	Other Required Courses Recommended Electives Learner Activities	Recommended Career and Technical Courses Source: Administrative Planning Guide www.doe.virginia.gov/VDOE/ Instruction/CTE/careclusters/ www.careclusters.org www.cleresource.org/cag/	SAMPLE – Occupations Relating to This Pathway: www.doe.virginia.gov/VDOE/ Instruction/CTE/careclusters/ www.careclusters.org www.cleresource.org/cag/			
	7	English 7 (1110)	Math 7 (3111)	Life Science (4115)	Civics and Economics (2357)						
	8	English 8 (1120)	Algebra I (3130)	Physical Sciences (4125)	World History/ Geography I (2215)	Spanish I (5510)					
	<p>Career Assessment: Administration of a career assessment instrument is appropriate at the middle school level to help students and their parents plan for high school (Virginia's Career Planning System or other assessment product). Virginia Wizard / Career View</p>										
	9	English (1130)	Geometry (3143)	Earth Sciences (4210)	World History/ Geography II (2216)	Health & PE (2 years) Foreign Languages (3 years) Other Electives to Complement Pathway (Core Academic and CTE):	NOTE: Use state course titles Inventions and Innovations (8464)	- Athletic Trainer - Audiologist - Certified Nursing Assistant - Chiropractor - Clinical Medical Assistant - Dietician - EMT/Paramedic - Exercise Physiologist - Home Health Aide - Massage Therapist - Medical Assistant - Nurse Practitioner - Occupational Therapist/Assistant - Physical Therapist/Assistant - Physician's Assistant - Radiologic Technician - Recreational Therapist - Respiratory Therapist - Surgical Technician/Technologist			
	10	English (1140)	Algebra II (3135)	Biology (4310)			Into to Health/Medical Sciences (8302)				
	11	English (1150)	Applied Algebra – Trigonometry (3161)	Chemistry (4410)	USVA History (2360)	Personal Finance (6120)	Medical Terminology (8383)				
	12	English (1160)	Math Analysis / Pre-Calculus (3162)	AP Biology (4340)	USVA Government(2440)	(6613) Computer Information Systems	8333 EMT Basic (DE) EMS 00,112,113,120				
<p>High school courses in the pathway offered locally for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)</p>											
<p>List related certifications/credentials approved by VDOE and offered locally: http://www.doe.virginia.gov/VDOE/Instruction/CTE/apg/ (Go to Certification – License Section)</p>		<p>Additional Learning Opportunities: CTSO Organization(s): <input type="checkbox"/> DECA <input type="checkbox"/> FFA <input type="checkbox"/> FCCLA <input type="checkbox"/> FBLA <input type="checkbox"/> HOSA <input type="checkbox"/> SkillsUSA <input type="checkbox"/> TSA</p>		<p>Work-Based Learning: <input checked="" type="checkbox"/> Career Research <input type="checkbox"/> Cooperative Education <input type="checkbox"/> Internship <input type="checkbox"/> Mentorship <input checked="" type="checkbox"/> Job Shadowing <input checked="" type="checkbox"/> Service Learning Project <input type="checkbox"/> Student Apprenticeship</p>							
<p>Postsecondary: Placement Assessments such as COMPASS & SAT II College Entrance Exams such as ACT & SAT</p>											
<p>SAMPLE POSTSECONDARY PROGRAMS RELATED TO THIS CAREER PATHWAY Individual plans must include locally agreed upon courses at the postsecondary level (See page 2)</p>											
Pathway			Associate Degree, College Certificate, or Apprenticeship			Bachelor's Degree			Postgraduate Degree		

Revised 3/2014

	Therapeutic Services	EMS-Paramedic, AAS	
--	----------------------	--------------------	--

College: Central Virginia Community College School Division(s): Bedford County Public Schools

Postsecondary: Placement Assessments such as COMPASS & SAT II

Semester	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives
POSTSECONDARY PLAN OF STUDIES MUST INCLUDE POSTSECONDARY ACADEMIC, CTE, AND OTHER ELECTIVE COURSES APPROPRIATE FOR AN ASSOCIATE DEGREE.					
Year 1 1 st Semester			Science Elective		EMS 111 Emergency Medical Technician EMS 151 Intro to Advanced Life Support EMS 170 ALS Internship I
Year 1 2 nd Semester					EMS 153 Basic ECG Recognition EMS 157 ALS Trauma Care EMS 172 ALS-Clinical Internship II EMS 173 ALS-Field Internship II
Year 2 1 st Semester	ENG 111 College Composition				EMS 207 Advanced Patient Assessment EMS 242 ALS-Clinical Internship III EMS 243 ALS Field Internship II
Year 2 2 nd Semester			Soc. Sci. Elective Humanities Elective		EMS 201 EMS Professional Development EMS 216 Paramedic Review EMS 244 ALS-Clinical Internship IV EMS 245 ALS-Field Internship III

College courses offered locally in the high school for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)

Related Industry Certifications Available:
 EMT, CPR, First Aid, EVOC, MOS

Additional Suggested Learning Opportunities:
Work-Based Learning:
 Cooperative Education Internship Mentorship
 Job Shadowing Service Learning Project Registered Apprenticeship

UNIVERSITY
 University/College:
 Degree or Major:
 Number of Articulated CC Credits:

Student Name: _____
 School: Bedford County Public Schools
 Date: 2014-15 Implementation

Cluster: Health Science Pathway: Biotech, Research, and Development

This Career Pathway Plan of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	English Language Arts	Mathematics	Science	Social Studies/ Science	Other Required Courses Recommended Electives Learner Activities	Recommended Career and Technical Courses Source: Administrative Planning Guide http://www.cleresource.org/apgy	SAMPLE – Occupations Relating to This Pathway: http://www.doe.virginia.gov/instruction/career_technical/career_clusters/sample_plans_studyindex.shtml http://www.cleresource.org/cpg/
NOTE: Indicate State Course Titles and Codes							
Graduation Requirements: http://www.doe.virginia.gov/instruction/graduation/index.shtml							
MIDDLE	7 English 7 (1110)	Math 7 (3111)	Life Science (4115)	Civics & Economics (2357)	Inventions and Innovations (8464)	Medical Lab Technician (hospital, private, physicians' office, health department, or industrial medical laboratories)	
	8 English 8 (1120)	Algebra I (3130)	Physical Sciences (4125)	World History/ Geography I (2215)	Spanish I (5510)	Computer Solutions (6009)	**Licensed Practical Nurse Technician **Emergency Medical Technician **Nuclear Medicine Technologist **Paramedic **Radiologic Technician **Respiratory Therapy
Career Assessment: Identify an appropriate career assessment instrument at the middle school level used to help students and their parents plan for high school: VA Wizard <input checked="" type="checkbox"/> or other assessment (please indicate): <u>Virginia View: Kuder</u>							
SECONDARY	9 English (1130)	Geometry (3143)	Earth Sciences (4210)	World History/ Geography II (2216)	Economics & Personal Finance (6120)	Into to Health/Medical Sciences (8302)	
	10 English (1140)	Algebra II (3135)	Biology (4310)		Health & PE (2 years) Foreign Language (3 years) Other Electives to Complement Pathway (Core Academic and CTE):	Medical Terminology (8383)	
	11 English (1150)	College Algebra / Elementary Statistics (Semester Classes)	College Chemistry for Engineers	US/VA History (2360)	College Success Skills (SDV 100) Internship	Principles of Biomedical Sciences (PLTW) / Human Body Systems (PLTW) Medical Interventions (PLTW) / Into to Medical Terminology	
	12 English (1160)	Engineering Math / Precalculus	Human Anatomy and Physiology	US/VA Government(2440)			
High school courses in the pathway offered locally for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)							
List related certifications/credentials approved by VDOE and offered locally: http://www.cleresource.org/apgy (Go to Certification – License Section) Virginia Workplace Readiness for the Commonwealth Credential (CTECS)							
Additional Learning Opportunities: CTSSO Organization(s): <input type="checkbox"/> DECA <input type="checkbox"/> FBLA <input type="checkbox"/> FCCLA <input type="checkbox"/> FFA <input type="checkbox"/> SkillsUSA <input type="checkbox"/> TSA <input type="checkbox"/> FEA <input type="checkbox"/> HOSA <input type="checkbox"/> TSA							
Work-Based Learning: <input checked="" type="checkbox"/> Career Research <input type="checkbox"/> Cooperative Education <input type="checkbox"/> Internship <input type="checkbox"/> Mentorship <input checked="" type="checkbox"/> Job Shadowing <input type="checkbox"/> Service Learning Project <input type="checkbox"/> Student Apprenticeship							
Postsecondary: Placement Assessments such as Virginia Placement Test or COMPASS College Entrance Exams such as ACT & SAT							
SAMPLE POSTSECONDARY PROGRAMS RELATED TO THIS CAREER PATHWAY Individual plans must include locally agreed upon courses at the postsecondary level (See page 2)							
POSTSECONDARY	Pathway		Associate Degree, College Certificate, or Apprenticeship		Bachelors Degree		Postgraduate Degree
	Biotech, Research, and Development		AAS – Medical Laboratory				

College: Central Virginia Community College		School Division(s): Bedford County Public Schools				
Semester		English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives
POSTSECONDARY PLAN OF STUDIES MUST INCLUDE POSTSECONDARY ACADEMIC, CTE, AND OTHER ELECTIVE COURSES APPROPRIATE FOR AN ASSOCIATE DEGREE.						
Year 1 1st Semester	ENG 111 College Composition I (DE)		BIO 101 General Biology (DE)	Social Science Elective	Humanities Elective	CHEM 111 College Chemistry I SDV College Success Skills
Year 1 2nd Semester	MTH 146 Introduction to Elementary Statistics		CHM 112 College Chemistry II	Social Science Elective	BUS 226 Computer Business Applications	ITE 115 Introduction to Computer Applications and Concepts BIO 205 General Microbiology
Year 2 1st Semester			MDL 261 Clinical Chemistry and Instrumentation I		HTL 141 Intro to Medical Terminology	MDL 215 Immunology MDL 235 Mycology
Year 2 2nd Semester			MDL 262 Clinical Chemistry and Instrumentation II		MDL 110 Urinalysis and Body Fluids	MDL 237 Clinical Bacteriology MDL 281 Clinical Correlations
College courses offered locally in the high school for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)						
Related Industry Certifications Available: Centra Certificate – Medical Laboratory Technology (Accredited by the National Accrediting Agency for Clinical Laboratory Services)		Additional Suggested Learning Opportunities: Work-Based Learning: <input type="checkbox"/> Cooperative Education <input checked="" type="checkbox"/> Internship <input checked="" type="checkbox"/> Mentorship <input type="checkbox"/> Registered Apprenticeship <input checked="" type="checkbox"/> Job Shadowing <input type="checkbox"/> Service Learning Project				
UNIVERSITY		University/College: Degree or Major: Number of Articulated CC Credits:				



Commonwealth of Virginia Plan of Study

Student Name: _____
School: Bedford County Schools
Date: 2015-16 Implementation

Cluster: Health Science Pathway: Support Services

This Career Pathway Plan of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	GRADE	English/Language Arts	Mathematics	Science	Social Studies/ Science	Other Required Courses Recommended Electives Learner Activities	Recommended Career and Technical Courses	SAMPLE – Occupations Relating to This Pathway:
	7	English 7 (1110)	Math 7 (3111)	Life Science (4115)	Civics and Economics (2357)		NOTE: Use state course titles Inventions and Innovations (8464)	Administrative Assistant
	8	English 8 (1120)	Algebra I (3130)	Physical Science (4125)	World History/ Geography I (2215)	Spanish I (5510)	Computer Solutions (6609)	Communications
	<p>Career Assessment: Administration of a career assessment instrument is appropriate at the middle school level to help students and their parents plan for high school (Virginia's Career Planning System or other assessment product). Virginia Wizard / Career View</p> <p style="text-align: center;">Graduation Requirements: http://www.doe.virginia.gov/2plus4in2004/index.shtml</p>							
	9	English (1130)	Geometry (3143)	Earth Sciences (4210)	World History/ Geography II (2216)	Health & PE (2 years) Foreign Language (3 years) Other Electives to Complement Pathway (Core Academic and CTE):	Into to Health / Medical Sciences (8302)	Data Entry Specialist
	10	English (1140)	Algebra II (3135)	Biology (4310)		Personal Finance (6120)	Medical Terminology (8383)	Environmental Sampling and Analysis Technician
	11	English (1150)	Applied Algebra – Trigonometry (3161)	Chemistry (4410)	US/VA History (2360)	Computer Information Systems (6613)		Food Service Worker
		English (1160)	Math Analysis / Pre-Calculus (3162)	AP Biology (4340)	US/VA Government (2440)	Career Internship (9628)	BIO 141-142 Human Anatomy and Physiology II ENG111 College Composition HLT 143 Medical Terminology I SDV 100 College Success Skills Humanities Elective BIO 205 General Microbiology PSY 230 Developmental Psychology	Front Office Assistant Materials Manager Medical Transcriptionist Medical, Clinical Laboratory Technologist Mortician Records Processing Assistant
	12							
High school courses in the pathway offered locally for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)								

Revised 4/29/2014

List related certifications/credentials approved by VDOE and offered locally:
<http://www.doe.virginia.gov/VDOE/Instruction/CTE/apg/> (Go to Certification – License Section)

Workplace Readiness Skills for the Commonwealth

Additional Learning Opportunities:
 CTSSO Organization(s): DECA FBLA FFA FEA HOSA SkillsUSA TSA

Work-Based Learning:
 Career Research Cooperative Education Internship Mentorship
 Job Shadowing Service Learning Project Student Apprenticeship

Postsecondary: Placement Assessments such as COMPASS & SAT II
 College Entrance Exams such as ACT & SAT

SAMPLE POSTSECONDARY PROGRAMS RELATED TO THIS CAREER PATHWAY
 Individual plans must include locally agreed upon courses at the postsecondary level (See page 2)

Pathway	Associate Degree, College Certificate, or Apprenticeship	Bachelor's Degree	Postgraduate Degree
Support Services	Dental Hygiene , AAS		

College: Central Virginia Community College / VA Western Community College School Division(s): Bedford County Public Schools

Postsecondary: Placement Assessments such as COMPASS & SAT II

Semester	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives
POSTSECONDARY PLAN OF STUDIES MUST INCLUDE POSTSECONDARY ACADEMIC, CTE, AND OTHER ELECTIVE COURSES APPROPRIATE FOR AN ASSOCIATE DEGREE.					
Year 1 1st Semester				DNH 111 Oral Anatomy DNH 115 Histology / Head and Neck Anatomy	DNH 120 Management of Emergencies DNH 130 Oral Radiography the for Dental the Hygienist
Year 1 2nd Semester		BIO 205 General Microbiology		DNH 216 Pharmacology	DNH 145 General and Oral Pathology DNH 146 Periodontics for the Dental Hygienist
Summer Semester				DNH 150 Nutrition	DNH 235 Management of Dental Pain and Anxiety
					DNH 141 Dental Hygiene I DNH 142 Dental Hygiene II



Commonwealth of Virginia Plan of Study

Student Name: _____
School: Bedford County Schools
Date: 2015-16 Implementation

Cluster: Health Science Pathway: Diagnostic Services

This Career Pathway Plan of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	GRADE	English/Language Arts	Mathematics	Science	Social Studies/ Science	Other Required Courses Recommended Electives Learner Activities	Recommended Career and Technical Courses Source: Administrative Planning Guide www.doe.virginia.gov/VDOE/ Instructor/CTE/appg	SAMPLE – Occupations Relating to This Pathway: www.doe.virginia.gov/VDOE/ Instruction/CTE/careerclusters/ www.careerclusters.org www.citersource.org/cpgg/
Graduation Requirements: http://www.doe.virginia.gov/2plus4in2004/index.shtml								
	7	English 7 (1110)	Math 7 (3111)	Life Science (4115)	Civics and Economics (2357)			
	8	English 8 (1120)	Algebra I (3130)	Physical Science (4125)	World History/ Geography I (2215)	Spanish I (5510)	Computer Solutions (6609)	Athletic Trainer Cardiovascular Technologist Computer Tomography (CT) Technologist Medical, Clinical Laboratory Technician Medical, Clinical Laboratory Technologist Nuclear Medicine Technologist Phlebotomist Radiologic Technologist, Radiographer Radiologist
Career Assessment: Administration of a career assessment instrument is appropriate at the middle school level to help students and their parents plan for high school (Virginia's Career Planning System or other assessment product). Virginia Wizard / Career View								
	9	English (1130)	Geometry (3143)	Earth Sciences (4210)	World History/ Geography II (2216)	Health & PE (2 years) Foreign Language (3 years) Other Electives to Complement Pathway (Core Academic and CTE):	Into to Health/Medical Sciences (8302)	
	10	English (1140)	Algebra II (3135)	Biology (4310)		Personal Finance (6120)	Medical Terminology (8383)	
	11	English (1150)	Applied Algebra – Trigonometry (3161)	Chemistry (4410)	USVA History (2360)	(6613) Computer Information Systems Career Internship (9828)		
		English (1160)	Math Analysis / Pre-Calculus (3162)	AP Biology (4340)	USVA Government (2440)		Human Anatomy & Physiology I/II (BIO 141-142) College Composition I (ENG111) Medical Terminology / (HLT 143) College Success Skills (SDV100) Principles of Psychology (PSY 200) Humanities Elective	
	12							
High school courses in the pathway offered locally for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)								
List related certifications/credentials approved by VDOE and offered locally: http://www.doe.virginia.gov/VDOE/Instruction/CTE/appg/ (Go to Certification – License Section)								
Workplace Readiness Skills for the Commonwealth								
Additional Learning Opportunities: CT/SO Organization(s): <input type="checkbox"/> DECA <input type="checkbox"/> FEA <input type="checkbox"/> FFLA <input type="checkbox"/> FFA <input type="checkbox"/> FCCIA <input type="checkbox"/> SkillsUSA <input type="checkbox"/> TSA								
Work-Based Learning: <input checked="" type="checkbox"/> Career Research <input type="checkbox"/> Cooperative Education <input type="checkbox"/> Internship <input type="checkbox"/> Mentorship <input checked="" type="checkbox"/> Job Shadowing <input checked="" type="checkbox"/> Service Learning Project <input type="checkbox"/> Student Apprenticeship								
College Entrance Exams such as ACT & SAT								
Postsecondary: Placement Assessments such as COMPASS & SAT II								

Revised 3/2014

SAMPLE POSTSECONDARY PROGRAMS RELATED TO THIS CAREER PATHWAY		
Individual plans must include locally agreed upon courses at the postsecondary level (See page 2)		
Pathway	Associate Degree, College Certificate, or Apprenticeship	Bachelor's Degree
Diagnostic Services	Radiologic Technology, AAS	Postgraduate Degree

College: <u>Central Virginia Community College</u>		School Division(s): <u>Bedford County Public Schools</u>			
Postsecondary: Placement Assessments such as COMPASS & SAT II					
Semester	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives
POSTSECONDARY PLAN OF STUDIES MUST INCLUDE POSTSECONDARY ACADEMIC, CTE, AND OTHER ELECTIVE COURSES APPROPRIATE FOR AN ASSOCIATE DEGREE.					
Year 1 1 st Semester			BIO 141 Human Anatomy and Physiology I	RAD 131 Elementary Clinical Procedures I	RAD 105 Introduction to Radiology, Protection and Patient Care RAD 100 College Success Skills
Summer Semester				HLT 141 Introduction to Medical Terminology	RAD 190 Coordinated Internship in Radiologic Technology RAD 205 Radiation Protection and Radiobiology
Year 1 2 nd Semester		MTH 120 Introduction to Mathematics		RAD 132 Elementary Clinical Procedures II	
Year 2 1 st Semester	ENG 111 College Composition			RAD 231 Advanced Clinical Procedures I	RAD 111 Radiologic Science I RAD 221 Radiologic Procedures II
Year 2 2 nd Semester				RAD 232 Advanced Clinical Procedures II	
Summer Semester				RAD 215 Correlated Radiographic Theory	RAD 240 Radiographic Pathology RAD 255 Radiographic Equipment
College courses offered locally in the high school for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)					
Related Industry Certifications Available: National Registry Examination - Registered Radiographer Additional Suggested Learning Opportunities: Work-Based Learning: <input type="checkbox"/> Cooperative Education <input checked="" type="checkbox"/> Internship <input type="checkbox"/> Mentorship <input type="checkbox"/> Registered Apprenticeship <input checked="" type="checkbox"/> Job Shadowing <input type="checkbox"/> Service Learning Project <input type="checkbox"/> Registered Apprenticeship					
UNIVERSITY Degree or Major: Number of Articulated CC Credits:					



Commonwealth of Virginia Plan of Study

Student Name: _____
School: Bedford County Schools
Date: 2016-17 Implementation

Cluster: Health Science Pathway: Health Informatics

This Career Pathway Plan of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	GRADE	English/Language Arts	Mathematics	Science	Social Studies/ Science	Other Required Courses Recommended Electives Learner Activities	Recommended Career and Technical Courses Source: Administrative Planning Guide www.doe.virginia.gov/VDOE/ Instruction/CTE/careerclusters/	SAMPLE – Occupations Relating to This Pathway: www.doe.virginia.gov/VDOE/ Instruction/CTE/careerclusters/ www.careerclusters.org www.careersource.org/cgi/		
Graduation Requirements: http://www.doe.virginia.gov/2plus4in2004/index.shtml										
	7	English 7 (1110)	Math 7 (3111)	Life Science (4115)	Civics and Economics (2357)		NOTE: Use state course titles Inventions and Innovations (8464)	Admitting Clerk Bioinformatics Technician		
	8	English 8 (1120)	Algebra I (3130)	Physical Science (4125)	World History/ Geography I (2215)	Spanish I (6510)	Computer Solutions (6609)	Clinical Ethicist Computer Programmer Dental Laboratory Technician		
Career Assessment: Administration of a career assessment instrument is appropriate at the middle school level to help students and their parents plan for high school (Virginia's Career Planning System or other assessment product). Virginia Wizard / Career View										
	9	English (1130)	Geometry (3143)	Earth Sciences (4210)	World History/ Geography II (2216)		Into to Health/Medical Sciences (8302)	Epidemiologist Financial Manager Health Educator		
	10	English (1140)	Algebra II (3135)	Biology (4310)			Medical Terminology (8383)	Medical Assistant Medical Biller, Patient Financial Services		
	11	English (1150)	Applied Algebra – Trigonometry (3161)	Chemistry (4410)	USVA History (2360)		Med Lab Tech I (8377)	Medical Information Technologist Medical, Health Services Manager		
	12	English (1160)	Math Analysis / Pre-Calculus (3162)	AP Biology (4340)	USVA Government (2440)		Med Lab Tech II (8378)			
High school courses in the pathway offered locally for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)										
		List related certifications/credentials approved by VDOE and offered locally: http://www.doe.virginia.gov/VDOE/Instruction/CTE/app/ (Go to Certification – License Section)			Additional Learning Opportunities: CTSO Organization(s): <input type="checkbox"/> DECA <input type="checkbox"/> FBLA <input type="checkbox"/> FFA <input type="checkbox"/> FCCLA <input type="checkbox"/> SkillsUSA <input type="checkbox"/> FEA <input checked="" type="checkbox"/> HOSA <input type="checkbox"/> TSA				Work-Based Learning: <input checked="" type="checkbox"/> Career Research <input type="checkbox"/> Cooperative Education <input type="checkbox"/> Internship <input type="checkbox"/> Mentorship <input checked="" type="checkbox"/> Job Shadowing <input checked="" type="checkbox"/> Service Learning Project <input type="checkbox"/> Student Apprenticeship	
		Workplace Readiness Skills for the Commonwealth								
		Postsecondary: Placement Assessments such as COMPASS & SAT II							College Entrance Exams such as ACT & SAT	
		SAMPLE POSTSECONDARY PROGRAMS RELATED TO THIS CAREER PATHWAY <small>Individual plans must include locally agreed upon courses at the postsecondary level (See page 2)</small>								
		Pathway	Associate Degree, College Certificate, or Apprenticeship			Bachelor's Degree			Postgraduate Degree	
		Health Informatics	Medical Laboratory Technology, AAS							

Revised 4/29/2014

College: Central Virginia Community College		School Division(s): Bedford County Public Schools				
Postsecondary: Placement Assessments such as COMPASS & SAT II		Mathematics	Science	Social Studies	Required Courses or Recommended Electives	
POSTSECONDARY PLAN OF STUDIES MUST INCLUDE POSTSECONDARY ACADEMIC, CTE, AND OTHER ELECTIVE COURSES APPROPRIATE FOR AN ASSOCIATE DEGREE.						
Year 1 1 st Semester	English 111 College Composition I		BIO 101 General Biology I CHM 111 College Chemistry I	Social Science Elective		SDV 100 College Success Skills
Year 1 2 nd Semester	MTH 146 Introduction to Elementary Statistics		CHM 112 College Chemistry II BIO 205 General Microbiology	Humanities Elective	BUS 226 Computer Business Applications or ITE 115 Introduction to Computer Applications and Concepts	
Year 2 1 st Semester					MDL 110 Urinalysis and Body Fluids MDL 125 Clinical Hematology I	MDL 236 Parasitology & Virology
Year 2 2 nd Semester					MDL 215 Immunology MDL 235 Mycology	MDL 261 Clinical Chemistry & Instrumentation I
					MDL 225 Clinical Hematology II	MDL 216 Blood Banking
					MDL 237 Clinical Bacteriology MDL 281 Clinical Correlations	MDL 262 Clinical Chemistry & Instrumentation II
College courses offered locally in the high school for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)						
Related Industry Certifications Available: Centra Certificate - Medical Laboratory Technology (Accredited by the National Accrediting Agency for Clinical Laboratory Sciences - NAACLS)						
Additional Suggested Learning Opportunities: Work-Based Learning: <input type="checkbox"/> Cooperative Education <input checked="" type="checkbox"/> Internship <input type="checkbox"/> Mentorship <input type="checkbox"/> Registered Apprenticeship <input checked="" type="checkbox"/> Job Shadowing <input type="checkbox"/> Service Learning Project						
UNIVERSITY Degree or Major: Number of Articulated CC Credits:						

Appendix F

Region 2000 Occupational Employment Data

Employment Projections by Career Clusters 2010-20 for Region 2000 provided by the Weldon Cooper Center,
University of Virginia

Pathways	Occupation Title	Predominant level of education and training*	Estimated Employment 2010	Projected Employment 2010	Numeric Change 2010-2020	Percent Change 2010-2020	Annual Job Openings	Annual VA Mean Wage 2011**	Annual VA Median Wage 2011**
			6,952	8,712	1,760	25%	303		
Therapeutic Services			6,064	7,665	1,601	26%	269		
	Dentists, General	Bachelor's or more & Training/certification	100	122	22	22%	5	\$195,050	\$184,110
	Pharmacists	Bachelor's or more	176	224	48	27%	9	\$113,610	\$114,670
	Family and General Practitioners	Bachelor's or more & Training/certification	78	108	30	38%	5	\$161,450	\$150,180
	Physicians and Surgeons, All Other	Bachelor's or more & Training/certification	120	149	29	24%	5	\$179,230	\$177,480
	Registered Nurses	Bachelor's or more	2,201	2,673	472	21%	87	\$65,710	\$63,710
	Physical Therapists	Bachelor's or more	138	198	60	43%	8	\$80,050	\$79,620
	Respiratory Therapists	Some college/Assoc	93	113	20	22%	4	\$55,450	\$55,580
	Dental Hygienists	Some college/Assoc	110	152	42	38%	6	\$81,280	\$81,450
	Pharmacy Technicians	Some college/Assoc & Training/certification	217	292	75	35%	12	\$29,250	\$28,430
	Licensed Practical and Licensed	Some college/Assoc	682	821	139	20%	32	\$39,260	\$38,560
	Opticians, Dispensing	Some college/Assoc & Training/certification	88	110	22	25%	4	\$40,070	\$39,080
	Nursing Aides, Orderlies, and	HS or less	1,590	2,061	471	30%	67	\$23,930	\$23,240
	Dental Assistants	Some college/Assoc	205	275	70	34%	11	\$36,290	\$34,630
	Medical Assistants	Some college/Assoc & Training/certification	266	367	101	38%	14	\$30,430	\$29,330
Diagnostic Services			275	327	52	19%	10		
	Radiologic Technologists and	Some college/Assoc	173	218	45	26%	7	\$57,490	\$56,790

	Health Technologists and Technicians, All Other	Some college/Assoc	102	109	7	7%	3	\$35,960	\$33,840
Health Informatics			245	288	43	18%	10		
	Medical Records and Health Information	Some college/Assoc	143	178	35	24%	7	\$35,550	\$33,080
	Medical Transcriptionists	Some college/Assoc	102	110	8	8%	3	\$33,280	\$33,000
Support Services			368	432	64	17%	14		
	Medical and Health Services Managers	Bachelor's or more	167	194	27	16%	7	\$95,400	\$87,610
	Healthcare Support Workers, All Other	Some college/Assoc	201	238	37	18%	7	\$32,500	\$30,850

Appendix G
Western Virginia
Occupational Employment
Data

Employment Projections by Career Clusters 2010-20 for Western Virginia provided by the Weldon Cooper Center, University of Virginia

Pathways	Occupation Title	Predominant level of education and training*	Estimated Employment 2010	Projected Employment 2020	Numeric Change 2010-2020	Percent Change 2010-2020	Annual Job Openings 2011**	Annual VA Mean Wage 2011**	Annual VA Median Wage 2011**
			15,933	18,819	2,886	18%	582		
	Therapeutic Services		12,787	15,169	2,382	19%	475		
	Dentists, General	Bachelor's or more & Training/certification	140	157	17	12%	6	\$195,050	\$184,110
	Dietitians and Nutritionists	Bachelor's or more & Training/certification	86	105	19	22%	5	\$54,730	\$53,870
	Pharmacists	Bachelor's or more	409	494	85	21%	18	\$113,610	\$114,670
	Family and General	Bachelor's or more & Training/certification	109	113	4	4%	2	\$161,450	\$150,180
	Physicians and Surgeons, All	Bachelor's or more & Training/certification	985	1,045	60	6%	26	\$179,230	\$177,480
	Physician Assistants	Bachelor's or more	135	148	13	10%	4	\$80,060	\$79,910
	Registered Nurses	Bachelor's or more	4,248	5,026	778	18%	155	\$65,710	\$63,710
	Occupational Therapists	Bachelor's or more	106	128	22	21%	4	\$79,510	\$80,770
	Physical Therapists	Bachelor's or more	251	320	69	27%	10	\$80,050	\$79,620
	Respiratory Therapists	Some college/ Assoc	177	214	37	21%	7	\$55,450	\$55,580
	Speech-Language	Bachelor's or more	138	163	25	18%	5	\$74,250	\$73,580
	Veterinarians	Bachelor's or more	78	114	36	46%	6	\$91,650	\$85,420
	Dental Hygienists	Some college/ Assoc	243	313	70	29%	12	\$81,280	\$81,450
	Emergency Medical Technicians and	Some college/ Assoc	266	364	98	37%	15	\$33,550	\$30,640
	Pharmacy Technicians	Some college/Assoc & Training/certification	500	658	158	32%	25	\$29,250	\$28,430
	Surgical Technologists	Some college/Assoc	215	241	26	12%	7	\$42,010	\$41,300
	Licensed Practical and	Some college/Assoc	1,153	1,295	142	12%	45	\$39,260	\$38,560

Opticians, Dispensing	Some college/Assoc & Training/certification	161	183	22	14%	5	\$40,070	\$39,080
Healthcare Practitioners	Bachelor's or more	96	105	9	9%	4	\$42,320	\$34,700
Nursing Aides, Orderlies, and	HS or less	2,604	3,174	570	22%	91	\$23,930	\$23,240
Physical Therapist	Some college/Assoc	81	111	30	37%	4	\$50,630	\$51,100
Dental Assistants	Some college/Assoc	182	221	39	21%	8	\$36,290	\$34,630
Medical Assistants	Some college/Assoc & Training/certification	424	477	53	13%	11	\$30,430	\$29,330
Diagnostic Services		1,039	1,224	185	18%	38		
Medical and Clinical	Bachelor's or more	135	150	15	11%	5	\$54,600	\$54,370
Medical and Clinical	Bachelor's or more	313	399	86	27%	15	\$38,020	\$36,340
Diagnostic Medical	Some college/Assoc	77	100	23	30%	3	\$66,360	\$67,250
Radiologic Technologists	Some college/Assoc	300	344	44	15%	9	\$57,490	\$56,790
Health Technologists	Some college/Assoc	214	231	17	8%	6	\$35,960	\$33,840
Health Informatics		929	1,029	100	11%	25		
Records and Health Information	Some college/Assoc	345	370	25	7%	9	\$35,550	\$33,080
Medical Transcriptionist	Some college/Assoc	195	195	-	0%	3	\$33,280	\$33,000
Medical Secretaries	Some college/Assoc & Training/certification	389	464	75	19%	13	\$33,040	\$32,530
Support Services		1,178	1,397	219	19%	44		
Medical and Health Services	Bachelor's or more	366	424	58	16%	15	\$95,400	\$87,610
Veterinary Assistants and	Some college/Assoc	229	271	42	18%	8	\$24,500	\$23,910
Healthcare Support	Some college/Assoc	583	702	119	20%	21	\$32,500	\$30,850

Appendix H

**Bedford Science and
Technology Center Bell
Schedule**

BSTC BELL SCHEDULE – 2013-2014***REGULAR SCHEDULE***

SCHOOL	ARRIVAL	DEPARTURE	ARRIVAL	DEPARTURE
LHS	9:15	12:05	1:10	3:10
SR	9:15	12:05	1:10	3:10
JF	9:20	11:45	1:10	3:10

CLUB DAY SCHEDULE

SCHOOL	ARRIVAL	DEPARTURE	ARRIVAL	DEPARTURE
LHS	9:15	11:20	1:30	3:10
SR (Club Students Only)	9:15	11:20	1:30	3:10
SR (Non-Club Students)	9:15	12:25	1:30	3:10
JF (All Students)	9:20	11:35	12:55	3:10

TWO HOUR DELAY

SCHOOL	ARRIVAL	DEPARTURE	ARRIVAL	DEPARTURE
LHS	11:15	12:50	1:50	3:10
SR	11:15	12:50	1:50	3:10
JF	11:20	12:25	1:50	3:10

TWO HOUR EARLY DISMISSAL

SCHOOL	ARRIVAL	DEPARTURE	ARRIVAL	DEPARTURE
LHS	9:15	10:50	11:50	1:10
SR	9:15	10:50	11:50	1:10
JF	9:20	10:25	11:45	1:10

THREE HOUR EARLY DISMISSAL

SCHOOL	DEPARTURE	ARRIVAL	DEPARTURE
LHS	10:15	11:15	12:10
SR	10:05	11:15	12:10
JF	10:30	NO STUDENTS	

Appendix I

Statement of Assurances

Governor's Health Sciences Academy

STATEMENT OF ASSURANCES

The authorized signature on this page certifies to the Virginia Department of Education that the authorized official assures that:

1. The planning committee has reviewed the provisions of *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* outlined in the Guidance Document, and understands that an implementation proposal will need to address these criteria and/or others approved by the Virginia Board of Education.
2. The planning committee agrees to follow the guidelines set forth in the *Administrative Procedures Guide for the Establishment of Governor's Health Sciences Academy* document.
3. ^{DRS} The regional Governor's Health Sciences Academy will be a jointly-operated program of at least two school divisions; an ongoing governing board will be established or maintained to reflect current Board of Education regulations relative to jointly-operated schools and programs.
4. A public school division will serve as the grant fiscal agent.

Certification by Authorized or Institutional Official:

The applicant certifies that to the best of his/her knowledge the information in this application is correct, that the filing of this application is duly authorized by the partners participating in this process to establish a regional Governor's Health Sciences Academy, and that the applicant will comply with the statements of assurances.

<u>Douglas R Schuch</u>	<u>Superintendent</u>
Typed or Printed Name of Authorized Official	Title
<u>Douglas R Schuch</u>	<u>4/28/2014</u>
Signature of Authorized Official	Date

(copy as needed)

Governor's Health Sciences Academy

STATEMENT OF ASSURANCES SUMMARY

(Leave Blank – to be completed by the VDOE)

The certification by authorized or institutional officials is held on file by the VDOE.

The applicant certifies that to the best of his/her knowledge the information in this application is correct, that the filing of this application is duly authorized by the partners participating in this process to establish a regional Governor's Health Sciences Academy, and that the applicant will comply with the statements of assurances.

Name

Title

Appendix J

Parent Program Information Samples



I Will Provide Care For You

Certified Nurse Aide (CNA) is a one year program available at **Bedford Science and Technology Center** for high school juniors or seniors. Students will gain skills in direct patient care as well as first aid, anatomy and physiology, nutrition and workplace readiness skills. Students will have the opportunity to sit for the CNA exam and enter the workplace and/or continue to pursue educational opportunities in the medical profession. Career opportunities are:

- **Nurse Aide**
- **Medical Assistant**
- **Medical Lab Tech**
- **Medical Records Tech**
- **Radiology/Medical Tech**



540-586-3933

What Will You Do?

Talk to your school counselor or go to www.bstcsharpshool.net for more information. *BCPS does not discriminate on the basis of race, color, national origin, sex, age, or disability in its programs, activities, or employment practices, as required by Title VI, Title IX and Section 504.*



I Will Be A Leader In the Medical Field

Licensed Practical Nursing (LPN) is open to high school seniors and adults from the community at the **Bedford Science & Technology Center**. This challenging eighteen month program is completed nine months after high school graduation providing students with the knowledge and skills needed to sit for the state exam to become an LPN. Many graduates go straight to work while others continue their education to become an RN or physician's assistant. Career opportunities include:

- **Medical-Surgical Nurse**
- **Operating Room Nurse**
- **Physician's Office Nurse**
- **School Nurse**
- **Private Duty Nurse**
- **Dialysis Facility Nurse**



540-586-3933

What Will You Do?

Talk to your school counselor or go to www.bstcsharpshool.net for more information. *BCPS does not discriminate on the basis of race, color, national origin, sex, age, or disability in its programs, activities, or employment practices, as required by Title VI, Title IX and Section 504.*

Emergency Medical Technician (EMT) is a one-year program available to high school juniors and seniors with dual enrollment with CVCC. Upon completion of the program at **Bedford Science & Technology Center** students will be prepared to test for certification as a Virginia and National Registry EMT/B. Students will learn first aid, CPR, lifesaving equipment, basic anatomy, physiology and medical terminology. With additional education, career opportunities include:

- **Emergency**
- **Medical Tech**
- **Fire Fighter**
- **Paramedic**



540-586-3933

What Will You Do?

Talk to your school counselor or go to www.bstcsharpshool.net for more information. *BCPS does not discriminate on the basis of race, color, national origin, sex, age, or disability in its programs, activities, or employment practices, as required by Title VI, Title IX and Section 504.*

Appendix K
Program
Application/Scoring Rubric

Academy Use ONLY: ACCEPT: _____ REJECTED: _____ Score: _____



Bedford County

Governor's Health Sciences Academy Application

Completed Application packets are due January 20, 2015 and must include the following:

- _____ Completed Application
- _____ Three Teacher Recommendations (one must be science)
- _____ Counselor Report
 - Student Transcript
 - Current Grade Report
 - Discipline Record
 - Virginia Placement Test results (MATH and ENGLISH)

3. List any extracurricular activities, projects, programs, or community service activities you have participated in and the associated organizations.

Organization	Activity	Date

4. Please feel free to provide any additional information you would like considered when reviewing your application.

To the best of my knowledge, the information on this application is accurate and represents my person point of view.

Student Signaure: _____ Date: _____

Bedford County Public Schools does not discriminate on the basis of race, color, national origin, sex, or disability in its programs, activities, or employment practices as required by Title VI, Title IX, and Section 504.

Governor's Health Sciences Academy Application

Faculty Recommendation

Directions for Student:

- Three recommendations are required (one must be a science teacher)
- Completed the designated parts of this form
- Be sure to allow at least one week for the teacher to fill out the recommendation

To Be Completed By the Student:

Student Name: _____
Last First MI

Date of Birth: _____ Present Grade Level: _____

To Be Completed By the Faculty Member Making Recommendation

Please rate the candidate in the following categories by selecting the appropriated number based on the following rating scale. Please provide a response to every question. You may provide additional comments in the "comments section" on the following page.

1=below average 2= average 3=above average 4=excellent

The student:

- | | |
|--|---------|
| 1. Interacts well with teachers and other students | 1 2 3 4 |
| 2. Produces acceptable written work | 1 2 3 4 |
| 3. Follows directions well | 1 2 3 4 |
| 4. Is a good listener | 1 2 3 4 |
| 5. Is able to understand the needs of others | 1 2 3 4 |
| 6. Is emotionally stable/ able to work well under stress | 1 2 3 4 |
| 7. Is compassionate | 1 2 3 4 |
| 8. Handles change well | 1 2 3 4 |
| 9. Is flexible | 1 2 3 4 |
| 10. Is detail oriented | 1 2 3 4 |
| 11. Works well in a variety of situations with a variety of people | 1 2 3 4 |
| 12. Is a quick thinker | 1 2 3 4 |

Governor's Health Sciences Academy Application

Counselor Recommendation

To Be Completed By the Student:

Student Name: _____ High School: _____
Last First MI

Date of Birth: _____ Present Grade Level: _____ Expected year of graduation: _____

School Counselor: _____ Counselor Phone: _____

Parent's or Guardian's Name: _____

Home Address: _____
Street City Zip

Parent's Phone: _____ Parent's email: _____

Student Phone: _____ Student's email: _____

STANDARDIZED TEST RECORD (This section to be completed by the counselor. Please type or print)

STANDARDS OF LEARNING SCORES

WRITING (GR8) _____	GEOMETRY _____	PSAT	V-SCORE _____
RLR (GR8) _____	BIOLOGY _____	PSAT	M-SCORE _____
ALGEBRA I _____	ALGEBRA II _____	PSAT	W-SCORE _____
EARTH SCIENCE _____			

ACHIEVEMENT RECORD (Please attach the student's current school transcript to this form)

CVCC PLACEMENT TEST (Please attach the student's CVCC Placement test scores for the MATH and ENGLISH tests). These scores are required for dual enrollment classes.

DISCIPLINE RECORD (Please attach the student's discipline record to this form) If there are extenuating circumstances, please explain below):

Governor's Health Sciences Academy Application Rubric

Student Name: _____ Base School: _____

RATING AREA	3	2	1	0
Attendance (Unexcused)	under 8 absences	8-11 absences	12-15 absences	over 15 absences
Cumulative GPA	3	2.5-3.0	2.0-2.5	below 2.0
Recommendations (teacher/counselor)	Highly Recommended	Recommended	Recommended with reservations	Do not Recommend
Discipline	No Discipline	No suspensions under 2 Referrals	Under 2 Suspensions Under 4 referrals	Over 2 Suspensions Over 4 referrals
Math Placement Test	Units 1-6 or above	Units 1-5		Does not meet
English Placement Test	Units 1-6 or above	Units 1-5		Does not meet
Future Career Goals	Related to program	Somewhat related to the program	Not related to the program	Not addressed in the statement
Interest in the Academy	Solid interest	Somewhat interested	Vaguely interested	Not addressed in the statement
Related Activities	Many intensely related activities	Some or somewhat related activities	Few related activities	Not addressed in the statement
Academy Visit:		Add 1 point of the student visit; Add 0 if no visit		
TOTAL				

In order to apply to the program student must:

- * have GPA above 2.0
- * Earn 5+ on math placement test
- * have completed Algebra I
- * background checks may be required to participate in programs with clinical experiences

Appendix L

Budget

**GOVERNOR'S HEALTH SCIENCES ACADEMY
2013-2014**

PLANNING/IMPLEMENTATION GRANT BUDGET
*(Includes the first \$5,000 payment)**

A – Director Costs	TOTAL			
	\$10,000 * Grant State Funds	Perkins Funds	Other Funds (Local or grant funds to be described in Budget Narrative)	In-Kind
1. Personnel --- 1000	\$ 1,000		\$264,870	\$2400
2. Employment Benefits --- 2000			\$ 20,262	
3. Purchased/Contractual Services ---- 3000		\$3000	\$1501	\$1,000
4. Internal Services ---- 4000				
5. Staff Development ---- 5000			\$ 3,500	
6. Summer Component Activities ---- 5000				
7. Travel ---- 5000	\$ 500			
8. Contractual Services ---- 5000				\$2,000
9. Materials and Supplies ---- 6000	\$ 2,500			
10. Equipment ---- 8000	\$ 6,000		\$ 22,000	
11. Facilities ---- 8000				
B – Indirect Costs **				
TOTAL	\$10,000	\$3000	\$312,133	\$5400

** If recovering indirect costs, the rate must not exceed the state approved indirect cost rate of the fiscal agent.

Appendix M

Insurance

CERTIFICATE OF INSURANCE

ISSUE DATE
06/27/2013

PRODUCER
Vaco Risk Management Programs
308 Market St., SE
Suite 1 & 2
Roanoke, VA 24011-

THIS CERTIFICATE OF INSURANCE IS ISSUED AS A MATTER OF INFORMATION ONLY. IT CONFERS NO RIGHTS UPON THE THIRD PARTY REQUESTING THE CERTIFICATE BEYOND WHAT THE REFERENCED POLICY OF INSURANCE EXPRESSLY PROVIDES. THIS CERTIFICATE OF INSURANCE DOES NOT EXTEND, AMEND, OR ALTER THE COVERAGE, TERMS, EXCLUSIONS, OR CONDITIONS AFFORDED BY THE POLICY REFERENCED IN THIS CERTIFICATE OF INSURANCE.

COMPANIES AFFORDING COVERAGE

INSURED
Bedford County Public Schools
310 South Bridge St
Bedford, VA 24523

COMPANY LETTER **A** Virginia Association of Counties Group Self-Insurance Risk Pool
COMPANY LETTER **B**
COMPANY LETTER **C**
COMPANY LETTER **D**
COMPANY LETTER **E**

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> OWNER'S & CONTRACTOR'S PROF. <input checked="" type="checkbox"/> 0 RETENTION	VA-BE-010B-14	07/01/2013	07/01/2014	GENERAL \$ 5,000,000 PRODUCTS-COMP/OP \$ 5,000,000 PERSONAL & ADV. INJURY \$ 5,000,000 EACH OCCURRENCE \$ 5,000,000 FIRE DAMAGE (Any one fire) \$ 500,000 MED. EXPENSE (Any one person) \$ 5,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input type="checkbox"/> GARAGE LIABILITY <input checked="" type="checkbox"/> 0 RETENTION	VA-BE-010B-14	07/01/2013	07/01/2014	COMBINED SINGLE LIMIT \$ 5,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE \$
	EXCESS LIABILITY <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM				EACH OCCURRENCE \$ AGGREGATE \$
A	OTHER Property Auto Physical Damage Crime School Leaders	VA-BE-010B-14 VA-BE-010B-14 VA-BE-010B-14 VA-BE-010B-14	07/01/2013 07/01/2013 07/01/2013 07/01/2013	07/01/2014 07/01/2014 07/01/2014 07/01/2014	\$1,000 Ded/Blanket per schedule on file \$1,000 Comprehensive \$1,000 Collision \$250,000 Blanket, \$250 Deductible \$5,000 Ded \$5,000,000 Limit

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

CERTIFICATE HOLDER

Bedford County Public Schools
310 South Bridge
Bedford, VA 24523

AUTHORIZED REPRESENTATIVE

