



**CAREER & TECHNICAL EDUCATION
CURRICULUM ADOPTION PROPOSAL (CAP) REPORT
BUSINESS & COMPUTER TECHNOLOGY
APRIL 2016**

Background of Career & Technical Education Programming in BHM Schools

The Business & Computer Technology Department currently has course offerings at the high school level. Typically, students also have the opportunity to explore this content at the middle school level. Currently, students in grades 9-12 have twenty elective choices that span a wide variety of topics in both business content and computer technology.

Content courses have progressed to include career exploration, preparation and various core business areas.

- STEEP (9th grade Student Transition to Education and Employment Portfolio)
- CIS College & Career Prep or College & Career Prep (Hybrid Option)
- Work Preparation Program
- Accounting 1 (Hybrid Option)
- CIS Accounting II
- Personal Financial Management
- Introduction to Business
- CIS Entrepreneurship
- Marketing
- CIS Marketing
- Law & Order

The computer technology courses have continued to evolve and currently include the following:

- STEM: Game It Programming
- Computer Applications: Word, Publisher, and Presentation Tools
- Computer Applications: Excel & Data Analysis
- Computer Applications II (Online Option)
- Photoshop Editing and Design
- Illustrations & Animations

- Computer Graphics II
- Web 1 - Introduction
- Web 2 - Multimedia

The department also offers BPA (Business Professionals of America) as an extracurricular activity.

Standards

The focus for standards implemented in the Business and Computer Technology Department are based off the National Business Educators Association.

The National Standards for Business Education are based on the conviction that business education competencies are essential for all students.

- Because all students will participate in the economic system, all students need to be literate in business and economics.
- Because all students will encounter a business environment that is characterized by diversity—both domestic and international—all students need to practice the interpersonal, teamwork, and leadership skills that will help them function successfully in that environment.
- Because all students will use technology as a tool for managing information, all students need to hone the lifelong learning skills that foster flexible career paths and confidence in adapting to a workplace that demands constant retooling.
- Technology has accelerated the pace and frequency of change not only in business but also in life. Today, life and work activities tend to overlap. This trend is likely to continue and will require more sophisticated decision-making in all spheres.
- The business education concepts as described in these national standards can contribute to the development of this “renaissance” worker. An education for and about business offers students the opportunity to master the fundamental knowledge and skills needed to succeed in business—and more importantly, an equal opportunity to succeed in life.

The department also references the International Society for Technology in Education standards when incorporating technology into courses.

1. Creativity and innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

- a. Apply existing knowledge to generate new ideas, products, or processes
- b. Create original works as a means of personal or group expression
- c. Use models and simulations to explore complex systems and issues
- d. Identify trends and forecast possibilities

2. Communication and collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
- c. Develop cultural understanding and global awareness by engaging with learners of other cultures
- d. Contribute to project teams to produce original works or solve problems

3. Research and information fluency

Students apply digital tools to gather, evaluate, and use information.

- a. Plan strategies to guide inquiry
- b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- d. Process data and report results

4. Critical thinking, problem solving, and decision making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

- a. Identify and define authentic problems and significant questions for investigation
- b. Plan and manage activities to develop a solution or complete a project
- c. Collect and analyze data to identify solutions and/or make informed decisions
- d. Use multiple processes and diverse perspectives to explore alternative solutions

Summary of Process for Review of Instructional Resources

As a part of the BHM Continuous Improvement Process, the BHS Business and Computer Technology Department identified the following improvement process goal:

The overall goal is to align with industry standards in the following areas:

- *Curriculum Offerings*
- *Classroom Environments*
- *Business Procedures*

During the 2014-15 school year, the Business and Computer Technology Department focused on exploring trends in delivery methods and resources. The department identified several best practices of new and outstanding business programs. Site visits were made to Alexandria and Sartell High School to observe innovative classroom environments and utilization of technology.

These visits inspired the department to pilot the following:

- Collaborative classroom environment in C210
- Dual/wireless projection system in C210
- Portable collaborative student whiteboard stations
- Wireless computer accessibility in C210

The successful implementation of these pilots led to the recommendations detailed below.

Recommendations

The Business and Computer Technology Department is recommending the following:

1. C211 Classroom Re-Design

- In an effort to expose students to the workplace trend of collaborative work environments, a complete re-design of the layout and functionality of room C211. is deemed necessary. This would include:
 - Collaborative work pods equipped with monitors, USB ports, and charging stations
 - Mobile one-to-one devices equivalent to current industry standards (Surface Pro 4)
 - Technology updates equivalent to current industry standards and practices

2. C209 Projection System Upgrade

- In an effort to create a functional shared-space, as well as increase accessibility for staff, students, and other organizations that use the space, a wireless projection system in room C209 is being proposed (similar to the system piloted in C210). This would allow:
 - Multiple access points for staff sharing the classroom.
 - Greater student access to projected material on individual devices. (Accommodation for students with visual impairments)

3. Curriculum Updates

- In an effort to continue to provide instruction that is relevant and reflective of best practices, the department is proposing the following:
 - Whiteboards/whiteboard paint for collaborative brainstorming stations

(piloted in 2015-16).

- Drawing tablets to expose computer graphics students to industry standards.
- Updated online business simulations, textbooks, and videos to provide differentiated curricular opportunities.

4. Miscellaneous

- Color Printer
 - Replacement necessary to meet industry standard printing practices and decrease printing costs.
- Chairs
 - Current chairs are nearing the end of their useful life and are no longer allowing for ergonomically appropriate adjustments.
- Labor Costs
 - Custodial overtime pay for C211 desk removal, carpet repair, paint, and student furniture assembly (desks and chairs).
 - Labor for infrastructure updates (wireless projection).

Financial Implications

The financial implications of the recommendations have been prioritized based on what is best for students. Level 1 priorities are the items deemed most beneficial for students. Level 2 requests are items that will make a valuable impact on current curriculum offerings.

The financial implications are outlined below:

Level	Goal Targeted	Item	Cost PerUnit	Quantity	Total
1	Goal 2	Surface Pro 4	\$900	35	\$31,500
1	Goal 3	Tables	\$1,090	6	\$6,540
1	Goal 3	Chairs	100	34	\$3,400
1	Goal 3	White boards	150	6	\$900
1	Goal 3	32" Monitors	\$900	6	\$5,400
1	Goal 3	TV Table Mounts	\$320	6	\$1,920
2	Goal 3	Whiteboard Paint / whole wall ultimate bundle	\$1,350	1	\$1,350
1	Goal 3	Labor costs (tear out current desk system)	\$37	15	\$555
1	Goal 3	Projection system - wireless (C211)	\$1,500	1	\$1,500
2	Goal 2	Color Printer	\$300.00	1	\$300
2	Goal 2	Drawing tablets	\$100.0	30	\$3,000
1	Goal 3	Wireless installations (C209)	\$1,613	1	\$1,613
2	Goal 2	Marketing, Business, Accounting simulations	\$1,600	3	\$4,800
2	Goal 1	Shark Tank DVD Season ?	\$25	3	\$75
1	Goal 2	Wireless Projector (C209)	\$600.00	1	\$600
2	Goal 1	Law & Order Textbook	\$95.00	40	\$3,800
2	Goal 1	CIS College & Career Prep Interviewing Video	100	1	\$100
Department Totals					\$67,353
				Priority 1	\$53,928
				Priority 2	\$13,425
	Goal 1	Develop curriculum offerings to expand our current level 1 courses			
	Goal 2	Business procedures to include business practices including business applications and online file storage			
	Goal 3	Classroom environments to include collaborative spaces			

Evaluation

Evaluation of the curriculum adoption will be monitored in several ways. Some of the anticipated desired outcomes include:

- Increased student engagement due to collaborative learning environments
 - Measured by student survey data
 - C211 will be evaluated during teacher PPD observations and compared to previous observations.
- Increased student satisfaction due to an increase in opportunities for differentiation

- Measured by student survey data and/or formative evaluation techniques

Next Steps

Once board approved, the Business and Computer Technology Department will begin the process for purchase of the resources. Business teachers will also seek training on new equipment as well as instructional resources. The classroom remodel of C211 will require scheduling both the removal of existing furniture and equipment, as well as the installation of new purchases.