East Penn School District

Curriculum and Instruction

Curriculum for: Grade 8 Computers

Course(s): Grade 8 Computers

Grades: 8

Department: Computer/Business Applications Length of Period (average minutes): 40

Periods per cycle: 6 Length of Course (yrs): ¼ (trimester)

Type of offering: Exploratory Credit(s) awarded: .33

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Entrepreneurship/Business Communications		
Enduring Understandings & Essential Questions	Skills and Knowledge	Standards
 Enduring Understandings: People experience and interpret media differently. The design process is created to manipulate targeted audiences. Personal online choices impact one's own digital environment. Successful businesses require a well-prepared business plan. Entrepreneurship connects community needs, products/services, and business skills. Essential Questions: How does media shape our perceptions of reality? How can digital communication be both creative and effective? How is imagery manipulated to create a perception? How is my digital footprint impacting the marketing that surrounds me? How does an understanding of marketing concepts help entrepreneurs? How does an individual become an entrepreneur? 	 Students will be skilled at Identifying entrepreneurship opportunities based on career goals, needs, and ideas. Using photo editing programs to enhance advertising, to manipulate perceptions, effectively communicate ideas. Creating media to capture an audience Recognizing the tools and techniques to effectively communicate. Self-reflecting to recognize how they have been persuaded by various means of communication. Creating websites to convey a message or an idea Using CSS Rules, including jpegs, gifs, and color to enhance a website. Using various coding languages to create and design a website. Evaluating a community need to establish a business Create a website, advertisements, and an App to promote the business idea. Understanding the need of a budget for personal and professional lives. Students will know the difference between creator and end-user that their online decisions impact their daily lives that effective digital communication impacts the decision making process instantaneously imagery impacts our perceptions the steps in producing a business plan 	ISTE Standards2a Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world5b Students collect data or identify relevant data sets, use digital tools to analyze them and represent data in various ways to facilitate problem-solving and decision making6c Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. CSTA Standards2-NI-04, Model the role of protocols in transmitting data across networks and the Internet2-NI-05, Explain how physical and digital security measures protect electronic information2-AP-16, Incorporate existing code, media, and libraries into original programs, and give attribution. Business, Computer, Information Technology StandardsBCIT15.3.8.B, Produce a wide variety of business documents with a focus on content, style, and format15.3.8.E, Choose appropriate electronic resources to meet project need15.3.8.U, Identify and employ various electronic communications options.

--15.9.8.L, Explain how technologies are used in marketing to gain a competitive advantage.

CEW Standards

- **--13.1.8.E** Analyze the economic factors that impact employment opportunities.
- --13.2.8.E Explain the importance of the essential workplace skills/knowledge such as, but not limited to: communication, personal initiative, technical literacy, technology.
- -- **I 3.3.8 D** Analyze budgets and pay statements such as expenses.
- -- **I 3.4.8.B** Evaluate how entrepreneurial traits influence career opportunities.
- -- **I 3.4.8.C** Identify and describe the basic components of a business plan.

Physical Computing/Coding

Enduring Understandings:

- Computer programming languages are necessary for the interaction of a user and the device.
- Coding can be used for problem solving and creation.
- Coding is a set of directions to accomplish a task, an element of programming.
- Creating apps will effectively communicate ideas.

Essential Questions:

 What does coding look like from start to finish?

Students will be skilled at...

- Creating a basic app that meets the needs of the community.
- Running, editing, debugging lines of code to create a final outcome.
- Troubleshooting techniques to solve a coding problem.
- Using programming languages to code animations
- Emerging programming languages to create applications to communicate ideas.

Students will know...

- the difference between block coding and other programming languages
- how computers help humans solve problems.
- use the problem-solving process to create digital content

CSTA Standards

- **--2-CS-02** Design projects that combine hardware and software components to collect and exchange data.
- **--2-NI-05** Explain how physical and digital security measures protect electronic information.
- **--2-AP-16** Incorporate existing code, media, and libraries into original programs, and give attribution.
- **--2-Ap-12** Design and iteratively develop programs that combine control structures, including nested loops and compound conditionals.
- **--2-NI-04** Model the role of protocols in transmitting data across networks and the Internet.
- **--2-IC-23** Describe tradeoffs between allowing information to be public and keeping information

- How can individuals develop technology to create positive experiences?
- How does the user, hardware and software interact?
- How do I express my ideas through coding an animation?
- How does consumer need inspire innovation?

private and secure.

CEW Standards

- **--13.1.8.E** Analyze the economic factors that impact employment opportunities.
- --13.1.8.F Analyze the relationship of school subjects, extracurricular activities, and community experiences to career
- -- 13.3.8.C Explain and demonstrate problem solving.
- **--13.4.8.B** Evaluate how entrepreneurial traits influence career opportunities.