CodeHS: Indiana Academic Standards

World of Computing

The World of Computing course is a first computer science course introducing the basics of programming with Karel the Dog, and allowing students to explore what a computer is and how technology has affected their lives. Students will learn to code using blocks to drag and drop, but they can switch between blocks and text as desired.

Indiana 6-8 Standards

6-8.DI.1 Use the basic steps in algorithmic problem-solving to design solutions (e.g., problem statement and exploration, examination of sample instances, design, implementing a solution, testing, and evaluation).

6-8.DI.4 Understand the notion of hierarchy and abstraction in computing including high-level languages, translation, instruction set, and logic circuits.

6-8.CD.1 Demonstrate an understanding of the relationship between hardware and software.

6-8.CD.4 Describe what distinguishes humans from machines focusing on human intelligence versus machine intelligence and ways we can communicate, as well as ways in which computers use models of intelligent behavior (e.g., robot motion, speech and language understanding, and computer vision).

6-8.PA.2 Implement problem solutions using a programming language that includes looping behavior, conditional statements, logic, expressions, variables, and functions.

6-8.PA.3 Demonstrate dispositions amenable to open-ended problem solving and programming (e.g., comfort with complexity, persistence, brainstorming, adaptability, patience, propensity to tinker, creativity, accepting challenge).

6-8.NC.1 Collaboratively design, develop, publish, and present products (e.g., videos, podcasts, websites) using technology resources that demonstrate and communicate curriculum concepts.

6-8.NC.2 Exhibit dispositions necessary for collaboration: providing useful feedback, integrating feedback, understanding and accepting multiple perspectives, socialization.

6-8.IC.2 Analyze the positive and negative impacts of technology on one's personal life, society, and our culture.

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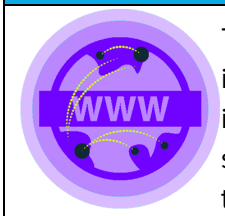
Introduction to the Internet
 The Introduction to the Internet course is a first computer science course introducing the basics of the basics of designing a web page, and how information and images are represented with computers, and the design and structure of the Internet. Students will create a portfolio on the web of projects they build throughout the course.
Indiana 6-8 Standards
6-8.DI.3 Represent data in a variety of ways (e.g., text, sounds, pictures, and numbers), and use different visual representations of problems, structures, and data (e.g., graphs, charts, network diagrams, flowcharts). **6-8.CD.3** Describe the major components and functions of computer systems and network. **6-8.PA.3** Demonstrate dispositions amenable to open-ended problem solving and programming (e.g., comfort with complexity, persistence, brainstorming, adaptability, patience, propensity to tinker, creativity, accepting challenge). **6-8.NC.1** Collaboratively design, develop, publish, and present products (e.g., videos, podcasts, websites) using technology resources that demonstrate and communicate curriculum concepts. **6-8.NC.2** Exhibit dispositions necessary for collaboration: providing useful feedback, integrating feedback, understanding and accepting multiple perspectives, socialization. **6-8.IC.2** Analyze the positive and negative impacts of technology on one's personal life, society, and our culture. **6-8.IC.4** Describe ethical issues that relate to computers and networks (e.g., security, privacy, ownership, and information sharing), and discuss how unequal distribution of technological resources in a global economy raises issues of equity, access, and power.

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Introduction Cybersecurity
 As our world becomes increasingly dependent on technology, cybersecurity is a topic of growing importance. It is crucial that companies and individuals take precautions to protect themselves from the growing threat of cyber attacks. This course prepares students with crucial skills to be responsible citizens in a digital future.
Indiana 6-8 Standards
6-8.NC.2 Exhibit dispositions necessary for collaboration: providing useful feedback, integrating feedback, understanding and accepting multiple perspectives, socialization. **6-8.IC.1** Exhibit legal and ethical behaviors when using technology and information and discuss the consequences of misuse. **6-8.IC.2** Analyze the positive and negative impacts of technology on one's personal life, society, and our culture. **6-8.IC.3** Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and biases that occur in electronic information sources. **6-8.IC.4** Describe ethical issues that relate to computers and networks (e.g., security, privacy, ownership, and information sharing), and discuss how unequal distribution of technological resources in a global economy raises issues of equity, access, and power.