Computer Applications

Junior High Computer Applications

This class will offer a highly differentiated look at keyboarding using the touch method, word processing (Word/Google Docs), presentation design and function (PowerPoint/Google Docs), spreadsheets (Excel/Google Docs), and databases (FileMaker). The class will also cover digital citizenship, which includes online safety, ethics, etiquette and appropriate behaviors for online use. All students will complete an electronic portfolio of their work. ***Parent's permission to use the Internet is required for participation in this course.*** (Quarter class) **Required course for <u>all</u> 7th graders**

This curriculum is based on standards taken from the Ohio Technology Curriculum Standards and the National Educational Technology Standards for Students developed by ISTE (International Society for Technology in Education).

Technology in Your Life

Nature of Technology

Standard 1; Benchmark A:2(7): Develop technological solutions to problems.
Standard 1; Benchmark A:3(7): Discuss ways that technology is linked to creativity and innovation.
Standard 1; Benchmark B:2(7): Describe ways that technological systems can be connected to one another.
Standard 1; Benchmark B:6(7): Recognize that maintenance is the process of inspecting and servicing a product or system on a regular basis.

Ethics, Technology and Society

Standard 1; Benchmark C:2(7): Identify products that have been applied to alternative settings.
Standard 1; Benchmark C:3(7): Explain how knowledge from other fields of study may impact the development of technological systems and products.
Standard 2; Benchmark A:1(7): Identify how new technologies have resulted from the demands, values and interests of individuals, businesses, industries and societies.
Standard 2; Benchmark D:1(7): Analyze a situation to determine the steps necessary to respect intellectual property rights, including patents, copyrights, tradenames, and trademarks.
Standard 2; Benchmark D:2(7): Discuss plagerism and it's ramifications.
Standard 2; Benchmark D:3(7): Understand that the installation of software requires a software licence and that that licence determines how many times that software may be installed.
Standard 2; Benchmark D:4(8): Discuss software piracy, its impact on the technology industry, and possible repercussions to individuals and/or school districts.
Standard 2; Benchmark D:5(7): Understand that photos, images, graphics, sounds, or videos displayed on the Internet are generally copywrite protected and may not be copied, pasted, saved, imported or used in new content without

permission of the owner.
Standard 2; Benchmark D:6(7): Explore the appropriate use of logos, icons, graphics, brands, etc. in relation to trademark and trade name rights.
Standard 2; Benchmark D:7(7): Analyze situations that arise regarding the use of intellectual property, including ethical considerations.
Standard 2; Benchmark D:8(7): Determine steps necessary to respect intellectual property rights.

Understanding your computer
Standard 3; Benchmark A:1(7): Use vocabulary related to computer and multimedia technology systems.
Standard 3; Benchmark A:3(7): Explain the purpose and different functions of software programs.

Internet

Information Literacy, Internet Use and Safety
NETS: Understand the ethical, cultural and societal issues related to technology.
NETS: Practice responsible use of technology systems, information and software.
NETS: Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
Standard 4; Benchmark C:1(7): Compose email messages and incorporate advanced techniques (attaching files, organizing folders, adding signatures, etc.).
Standard 4; Benchmark C:2(7): Acquire and disseminate information by participating in virtual learning activities.
Standard 5; Benchmark A:1(7): Assess the objectivity of a source when using information.
Standard 5; Benchmark A:2(7): Compare multiple sources to check accuracy of information.
Standard 5; Benchmark A:3(7): Determine the scope of coverage for a given source.
Standard 5; Benchmark A:4(7): Chart information gathered from multiple sources to determine facts to be used in a project.
Standard 5; Benchmark C:3(7): Use Boolean operators in the search process.
Standard 5; Benchmark C:4(7): Perform searches for information in specific formats (e.g., graphics, images, journal entries, videos).
Standard 5; Benchmark C:15(7): Compare information found in searches done using different types of Internet resources.
Standard 5; Benchmark D:1(7): Compare search results through the use of different keywords.
Standard 5; Benchmark B:2(7): Select and evaluate information about a specific topic in several sources.
Standard 5; Benchmark B:4(7): Compile information learned about a topic from a variety of sources.
NETS: Use technology to locate, evaluate, and collect information from a variety of sources.

Keyboarding

Keyboarding Skills and Techniques

Standard 3; Benchmark B:8(4): Use proper keyboarding techniques. Locate, identify and utilize the parts of a computer keyboard.
Standard 3; Benchmark B:6(5): Use appropriate hand/finger (touch keyboarding skills) positions to key all letters.
Standard 3; Benchmark B:4(7): Develop speed and accuracy when keyboarding, and transition to a word processing environment.

Communication Tools

Productivity Applications

NETS: Demonstrate a sound understanding of the nature and operation of technology systems.
Standard 3; Benchmark B:1(7): Solve problems using all available technologies for inquiry, investigation, analysis, and presenting conclusions (required of all communication tools).
Standard 3; Benchmark C:1(7): Use content specific tools, software, and simulations to support learning and research to create educational projects.
Standard 3; Benchmark C:2(7): Apply technology resources to support group collaboration and learning throughout the curriculum.
Standard 4; Benchmark A:1(7): Classify reasons to communicate information, and explain why technology enhances communication.
Standard 4; Benchmark A:3(7): Generate multimedia presentations that communicate information for specific purposes.
Standard 4; Benchmark B:1(7): Select the appropriate software tool to create and publish print information.
Standard 4; Benchmark B:2(7): Distinguish electronic file types, and determine extensions including .txt, .doc, .rtf, .pdf, and others.
Standard 4; Benchmark B:3(7): Insert original sound files into multimedia presentations.
Standard 4; Benchmark B:4(7): Insert copyright-free images (photos/graphics) into multimedia presentations.
Standard 4; Benchmark B:5(7): Transform digital images by using editing software to:
- Crop;
- Rotate, flip, invert;
- Add text, borders, decorative elements;
- Adjust color;
- Layer or merge images.

Standard 5; Benchmark B:5(7): Create information products to share information using different formats.
Standard 7; Benchmark B:3(7): Identify and explain the appropriate tools , machines, and electronic devices used to produce and /or reproduce design solutions.

NETS: Use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.
NETS: Use technology tools to process data and report results.
NETS: Use technology resources for solving problems and making informed decisions.
NETS: Employ technology in the development of strategies for solving problems in the real world.