



Computer Technology Technology and Coding Innovations

(Grade 7)



ORGANIZING THEME/TOPIC

FOCUS STANDARDS & SKILLS

| | |
|--|--|
| <p>Theme: Organizing Digital Life</p> <p>Technology literacy for life-long learning Managing your digital life</p> <p>Time Frame: 1 Week and integrated throughout course projects</p> <p><u>NETS Standard(s): Technology Operations and Concepts</u></p> | <p>Demonstrate understanding of technology concepts, systems, and operations. (NETS 6)</p> <ul style="list-style-type: none"> • Demonstrate basic computer operations, hardware/software and file management skills that are essential to life-long learning. • Develop a semester-long digital portfolio that documents skill development. <p>Locate, access, navigate, perform functions for a lifetime of learning</p> <ul style="list-style-type: none"> • Check grades • Compose and sending an email • Access class materials in a learning management system (LMS) • Submit assignments and documents in a learning management system (LMS) • Navigate current operating system (OS) mac/windows to locate libraries... • Correctly save files on the network drives • Identify a connection of each technology system for use in other classes/content areas |
| <p>Theme: Word/Numerical Processing</p> <p>Word Processing Spreadsheets Charts and Graphs</p> <p>Time Frame: 2-4 Weeks</p> <p><u>NETS Standard(s): Communication and Collaboration</u></p> | <p>Use digital media to communicate and work collaboratively to support individual learning and contribute to the learning of others (NETS 2)</p> <ul style="list-style-type: none"> • Select and create documents aligned to the purpose of a project. <p>Use spreadsheet tools and functions to solve problems and draw conclusions</p> <ul style="list-style-type: none"> • Use math functions (sums, average). • Create and format charts and organize information in a graphic format. • Use database functions within spreadsheets (sort data/select). • Insert data and analyze information. <p>Use word processing toolbars to create and enhance documents.</p> <ul style="list-style-type: none"> • Open, edit, copy, cut and paste text and images in a word processing document. • Use tools to help proofread documents. • Use templates as necessary in creating new documents. • Insert and format graphics in a word processing document. • Format the page layout in a word processing document. • Insert headers and footers. |

| | |
|--|---|
| <p>Theme: Digital Citizenship</p> <p>Digital research and investigations Proper citations Safety and ethics</p> <p>Time Frame: 2-3 Weeks</p> <p><u>NETS Standard(s): Research and Information Fluency</u></p> | <p>Practice safe, legal, and responsible use of information and technology (NETS 5.a)</p> <p>Safe use of technology</p> <ul style="list-style-type: none"> • Recognize different forms of cyberbullying (e.g. denigration, cyberstalking, impersonation, exclusion, harassment, trickery, outing, flaming, trolling, sexting, stalking) • Identify multiple methods for reporting cyberbullying at home/school • Identify methods online predators use to form and build inappropriate relationships with adolescents <p>Ethical use of technology</p> <ul style="list-style-type: none"> • Demonstrate how to locate resources and support those who have been cyberbullied • Identify threats to digital life (i.e. phishing, malware, spyware, viruses) • Recognize the difference between private/personal information and public information that contributes to a positive digital footprint • Use digital information appropriately/ethically • Paraphrase authentic work from a variety of resources • Properly cite online sources |
| <p>Theme: Digital Creation and Editing</p> <p>Multimedia projects Communicating an idea or message</p> <p>Time Frame: 4-6 Weeks</p> <p><u>NETS Standard(s): Creativity and Innovation</u></p> | <p>Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology (NETS 1)</p> <p>Create and utilize multimedia to effectively communicate a message.</p> <ul style="list-style-type: none"> • Locate and use tutorial information to create a presentation • Save/organize files in preparation for creating and editing a multi-media project • Use software menus and tools to improve a multi-media project (Web 2.0, Photo Story/Movie Maker, Power Point, Adobe Photoshop, Google Presentations) • Include several types of media in a creative presentation (photos, audio, text) • Apply basic color and design concepts to create or modify graphics (digital photo editing, Power Point design backgrounds, Web 2.0) • Effectively present content to an audience in a clear, organized and concise manner • Express useful and meaningful critiques and comments to fellow students and media • Determine the appropriate use of mobile applications to design and publish multimedia projects |

| | |
|---|--|
| <p>Theme: Computer Science and Programming</p> <p>Introduction to coding Logic Introduction to computer science</p> <p>Time Frame: 4-6 Weeks</p> <p><u>NETS Standard(s): Critical thinking, problem solving, and decision making</u></p> | <p>Use critical thinking skills to plan and conduct research, solve problems using appropriate digital tools and resources.</p> <p>Construct knowledge and develop innovative products and processes using technology.</p> <ul style="list-style-type: none"> • Use coding language or tiles to manipulate objects. • Analyze code and predict what an object will do • Sequence events, and form a conditional statement (if ____ then ____...) • De-bug and problem-solve <p>Explore how computer science has impacted our world</p> <ul style="list-style-type: none"> • Identify at least 3 famous people associated with various fields and technological innovations • Use technology related vocabulary correctly in context • Explain how a computer works • Distinguish between Web 1.0, 2.0, 3.0, and trending technologies • Explore innovative, trending and future technologies and their application in our lives |
|---|--|