



# Computer Technology Digital Media and Design

**(Grade 8)**



ORGANIZING THEME/TOPIC	FOCUS STANDARDS & SKILLS
<p><b>Overarching Instructional Approach: Student-driven Design Projects</b></p> <ul style="list-style-type: none"> <li>Design process</li> <li>Investigation of challenge situation</li> <li>Ideation</li> <li>Understanding constraints</li> <li>Testing and refining</li> <li>Prototype creation</li> <li>Communicating for an audience</li> <li>Presentation and display</li> </ul> <p>Time Frame: Small projects throughout course offering progressively more student voice and choice, 4-5 Weeks for culminating passion project</p> <p><a href="#"><u>NETS Standard(s): Critical thinking, problem solving, and decision making</u></a>  <a href="#"><u>NETS Standard(s): Creativity and Innovation</u></a></p>	<p>Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. (NETS 1)</p> <p>Utilize design thinking and technology to solve a challenge or meet a need.</p> <ul style="list-style-type: none"> <li>• Identify a challenge or need</li> <li>• Demonstrate empathy in understanding need and collaborate to develop solutions</li> <li>• Identify constraints</li> <li>• Design a solution to meet the challenge or need</li> <li>• Develop and refine a prototype</li> <li>• Present solution appropriate for intended audience</li> </ul>
<p><b>Theme: Organizing Digital Life</b></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><a href="#"><u>NETS Standard(s): Technology Operations and Concepts</u></a></p>	<p>Demonstrate understanding of technology concepts, systems, and operations. (NETS 6)</p> <ul style="list-style-type: none"> <li>• Demonstrate basic computer operations, hardware/software and file management skills that are essential to life-long learning</li> <li>• Develop a semester-long digital portfolio that documents skill development.</li> </ul> <p>Locate, access, navigate, perform functions for a lifetime of learning</p> <ul style="list-style-type: none"> <li>• Check grades</li> <li>• Compose and sending an email</li> <li>• Access class materials in a learning management system (LMS)</li> <li>• Submit assignments and documents in a learning management system (LMS)</li> <li>• Navigate current operating system (OS) mac/windows to locate libraries...</li> <li>• Correctly save files on the network drives</li> <li>• Identify a connection of each technology system for use in other classes/content areas</li> </ul>

<p><b>Theme: Word/Numerical Processing</b></p> <p>Word Processing Spreadsheets Charts and Graphs</p> <p>Time Frame: Integrated into digital media projects</p> <p><a href="#"><u>NETS Standard(s): Communication and Collaboration</u></a> <a href="#"><u>NETS Standard(s): Research and Information Fluency</u></a></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"> <li>• Select and create documents aligned to the purpose of a project.</li> </ul> <p>Use spreadsheet tools and functions to solve problems and draw conclusions</p> <ul style="list-style-type: none"> <li>• Use math functions (sums, average)</li> <li>• Create and format charts and organize information in a graphic format</li> <li>• Use database functions within spreadsheets (sort data/select) to analyze information</li> <li>• Insert data into digital media</li> </ul> <p>Use word processing to create and enhance content for digital media.</p> <ul style="list-style-type: none"> <li>• Use tools and commands to create text and images for use in digital media</li> <li>• Use tools to help proofread and edit</li> <li>• Use templates as appropriate</li> <li>• Insert and format graphics in digital media</li> <li>• Format the display/layout</li> </ul>
<p><b>Theme: Digital Citizenship</b></p> <p>Digital research and investigations Online collaboration Proper citations Safety and ethics</p> <p>Time Frame: 2-3 Weeks and reinforced throughout course</p> <p><a href="#"><u>NETS Standard(s): Communication and Collaboration</u></a> <a href="#"><u>NETS Standard(s): Research and Information Fluency</u></a></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"> <li>• Recognize different forms of cyberbullying (e.g. denigration, cyberstalking, impersonation, exclusion, harassment, trickery, outing, flaming, trolling, sexting, stalking)</li> <li>• Identify multiple methods for reporting cyberbullying at home/school</li> <li>• Identify methods online predators use to form and build inappropriate relationships with adolescents</li> </ul> <p>Digital research and ethical use of technology</p> <ul style="list-style-type: none"> <li>• Discuss the power and influence of digital and social media on our social and emotional wellbeing.</li> <li>• Identify threats to digital life (i.e. phishing, malware, spyware, viruses)</li> <li>• Recognize the difference between private/personal information and public information that contributes to a positive digital footprint</li> <li>• Demonstrate how to locate resources and support those who have been cyberbullied</li> <li>• Collaborate effectively and respectfully</li> <li>• Use digital information appropriately/ethically</li> <li>• Paraphrase authentic work from a variety of resources</li> <li>• Properly cite online sources</li> </ul>

<p><b>Theme: Digital Creation and Editing</b></p> <p>Communicating an idea or message Multimedia projects integrating:</p> <ul style="list-style-type: none"> <li>• Presentations</li> <li>• Digital Photography and Graphics</li> <li>• Animation</li> <li>• Video</li> <li>• Audio and soundtracks</li> <li>• Special effects</li> <li>• Webpage design</li> <li>• Online collaboration tools</li> </ul> <p>Time Frame: 4-6 Weeks</p> <p><a href="#"><u>NETS Standard(s): Creativity and Innovation</u></a></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"> <li>• Locate and use tutorial information to create a presentation</li> <li>• Save/organize files in preparation for creating and editing a multi-media project</li> <li>• Use software menus and tools to improve a multi-media project (Web 2.0, Photo Story/Movie Maker, Power Point, Adobe Photoshop, Google Presentations)</li> <li>• Include several types of media in a creative presentation (photos, audio, text)</li> <li>• Apply basic color and design concepts to create or modify graphics</li> <li>• Effectively present content to an audience in a clear, organized and concise manner</li> <li>• Express useful and meaningful critiques and comments to fellow students and media</li> <li>• Collaborate effectively and respectfully</li> <li>• Determine the appropriate use of mobile applications to design and publish multimedia projects</li> </ul>
<p><b>Theme: Coding in Digital Media and Web</b></p> <p>Introduction to coding Sequencing and Logic</p> <p>Time Frame: 3-4 Weeks</p> <p><a href="#"><u>NETS Standard(s): Critical thinking, problem solving, and decision making</u></a></p>	<p>Use critical thinking skills to plan and conduct research, solve problems using appropriate digital tools and resources.</p> <p>Construct knowledge and skills using digital media and web page development tools</p> <ul style="list-style-type: none"> <li>• Use coding language or tiles to manipulate objects</li> <li>• Analyze code and predict what an object will do</li> <li>• De-bug and problem-solve</li> </ul>
<p><b>Theme: Digital Media and Career Awareness</b></p> <p>Introduction to digital media fields Career and college awareness Career and college readiness</p> <p>Time Frame: Integrated throughout course</p> <p><a href="#"><u>NETS Standard(s): Critical thinking, problem solving, and decision making</u></a></p>	<p>Explore how digital media technology affects our lives and our world.</p> <ul style="list-style-type: none"> <li>• Identify at least 3 famous people associated with digital media and technological innovations</li> <li>• Use technology related vocabulary correctly in context</li> <li>• Explore innovative, trending and future technologies and their application in our lives</li> </ul> <p>Career Awareness</p> <ul style="list-style-type: none"> <li>• Explore career possibilities, personal interests and aptitudes</li> <li>• Explore high school and college preparation options related to careers</li> </ul> <p>Career and College Readiness</p> <ul style="list-style-type: none"> <li>• Interpret technical readings</li> <li>• Demonstrate goal-setting, planning, time and project management</li> <li>• Accurately measure and calculate using whole numbers, decimals and fractions</li> <li>• Work collaboratively with a team to accomplish team goals</li> <li>• Apply creative and critical thinking skills to solve problems</li> </ul>