Grade 8 - Digital Media & Tech-Driven Product Development

Course Information

Grade(s):	☐ K ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5	☐ 6 ☐ 7 ☑ 8	☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ Other _____
Discipline/Course:	Library Media/Tech Department - 8th Grade Elective		
Course Title:	Digital Media & Tech-Driven Product Development		
Prerequisite(s):	6th Grade: Introduction to Digital Applications		
Course Description: *Program of Studies*	This course aims to critically analyze media to deconstruct the message, design, and technical devices that influence the audience, including AI. Students will create media to sell a product or idea to a specific audience by following the pre-production, production, and post-production process.		
Course Essential Questions:	• What key questions can we ask to decipher a digital image? • What are the similarities and differences between human and AI-generated media? • What are the actual impacts of AI on human creativity and intellectual property rights? • What messaging techniques are used to create media? • What design (creative) techniques are used to create a digital message? • What impact does AI have on the consumer? • What technical skills or AI tools are used to create media? • How can AI be used ethically? • What messaging techniques are used to create media? • What product are we creating, and what target audience are you selling to? • What problem does our product solve? • What tools/programs/resources do we need to create our product?		

	● How will we reach our target audience? ● What design (creative) techniques are used to create a digital message? ● What is the purpose of Creative Commons? ● How will we determine the success of your product? ● What can we change about our product and or marketing to make it more successful?	
Course Enduring Understandings:	Media messages are carefully constructed using messaging, design, and technical skills. There is a process for developing digital video. AI will change everything we know about how we perceive digital media. All digital images can be manipulated for specific purposes, which, as a result, can produce different experiences for each individual. All digital media can be manipulated for specific purposes, which, as a result, sells a product or an idea. Creating influential digital media requires careful planning, clear and crafted messaging, innovative design, and competency in technical skills. The creator utilizes a variety of design techniques to achieve this. A creator must have an understanding of how to properly use the appropriate media tools and use them to help create the desired impact on the consumer. Developing a product requires a comprehensive understanding of iterative design processes and effective problem-solving skills to create a product for a target audience.	
Duration: **Credit:**	☑ Quarter ☐ Semester ☐ Full-Year	☐ 0.5 Credit (s) ☐ 1.0 Credit(s) ☐ 1.5 Credit(s) ☑ N/A
Course Materials/Resources:	● Web-based digital photo editing applications ● Web-based video editing applications ● Web-based AI media generation applications ● Graphic Design and Programming platform ● Web-based coding applications	

FPS Course Academic Expectation(s):	☑ Exploring and Understanding (EU) ☑ Synthesizing and Evaluating (SE) ☑ Creating and Constructing (CC) ☑ Conveying Ideas (CI) ☑ Collaborating Strategically (CS) ☑ Using Communication Tools (UCT)
Year at a Glance (Units):	**Unit 1:** Analyzing and Understanding Media Messaging (~1-2 weeks) **Unit 2:** Creating Digital Media Messages (~2-3 weeks) **Unit 3:** Application Design (~4-5 weeks)

Unit Number and Title:	**Unit 1 -** Analyzing and Understanding Media Messaging
Duration:	~1-2 weeks
Resource(s):	Web-based digital photo editing applications Web-based video editing applications Web-based AI media generation applications Graphic Design and Programming platform Web-based coding applications
Unit Overview:	Students will critically analyze media to deconstruct the message, design, and technical devices used to influence the audience. Students will compare human-created media to AI-generated media. Students will reflect and predict how AI will impact human creativity and intellectual property.
Learning Goals	
Standard(s):	**ISTE 1.2 Digital Citizen** 1.2a: Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world. 1.2b: Students engage in positive, safe, legal, and ethical behavior when using technology, including social interactions online or when using networked devices. 1.2c Students demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property. 1.2d: Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online. **ISTE 1.6 Creative Communicator** 1.6c: Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models, or simulations. 1.6d: Students publish or present content that customizes the message and medium for their intended audiences.

	ISTE Empowered Learner 1.1d: Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use, and troubleshoot current technologies, and can transfer their knowledge to explore emerging technologies. **ISTE Empowered Learner** 1.1d: Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use, and troubleshoot current technologies, and can transfer their knowledge to explore emerging technologies. 1.3.d build knowledge by actively exploring real-world issues and problems, developing ideas and theories, and pursuing answers and solutions.
Essential Question(s):	What messaging techniques are used to create a digital video? What design (creative) techniques are used to create a digital video? What technical skills are used to create a digital video? What key questions can I ask to decipher a digital image? What are the similarities and differences between human and AI-generated media? What are the real impacts of AI on human creativity and intellectual property rights?
Enduring Understanding(s):	Media messages are carefully constructed using messaging, design, and technical skills. There is a process for developing digital video. AI will change everything we know about how we perceive digital media. All digital images can be manipulated for specific purposes, which, as a result, can produce different experiences for each individual.
Learning Goal(s): *Students will know and will be able to use their learning to:* (Content/ Skills)	**Content:** (Students will know…) ● media message techniques. ● media design techniques. ● media technology techniques. ● image-based persuasion techniques used by marketing and news companies to influence audiences.

	● image-based persuasion techniques used by individuals to influence audiences. ● media manipulation of a person's self-perception through algorithms. **Skills:** (Students will be able to…) ● critically analyze media for message, purpose, and deception. ● critically analyze media for design techniques. ● determine the source and purpose of an influential image. ● use the CML key concept questions to analyze media. ● use CML or the CRAAP test to determine the validity of media.

Unit Number and Title:	**Unit 2 -** Creating Digital Media Messages
Duration:	~ 2-3 weeks
Resource(s):	Web-based digital photo editing applications Web-based video editing applications Web-based AI media generation applications Graphic design and programming platform Web-based coding applications
Unit Overview:	Students will create media to sell a product or idea to a specific audience by following the pre-production, production, and post-production process. Students will use the Five Key Questions from the CML Framework when they are developing media. Students will use AI to generate media. Students will review and select the appropriate tools to manipulate and edit digital media.
Learning Goals	
Standard(s):	**ISTE 1.6 Creative Communicator** **1.6b** Students create original works or responsibly repurpose or remix digital resources into new creations. **1.6c** Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models, or simulations. **1.6d** Students publish or present content that customizes the message and medium for their intended audiences. **ISTE 1.4 Innovative Designer** **1.4a** Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems. **1.4c** Students develop, test, and refine prototypes as part of a cyclical design process. **ISTE Empowered Learner** **1.1d** Students understand the fundamental concepts of technology operations, demonstrate the ability to

	choose, use, and troubleshoot current technologies, and are able to transfer their knowledge to explore emerging technologies. **ISTE 1.7 Global Collaborator** **1.7d** Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.
Essential Question(s):	● What messaging techniques are used to create media? ● What design (creative) techniques are used to create a digital message? ● What technical skills or AI tools are used to create media? ● How can AI be used ethically?
Enduring Understanding(s):	All digital media can be manipulated for specific purposes, which, as a result, sells a product or an idea. Creating influential digital media requires careful planning, clear and crafted messaging, innovative design, and competency in technical skills. The creator utilizes a variety of design techniques to achieve this. A creator must have an understanding of how to properly use the appropriate media tools and use them to help create the desired impact on the consumer.
Learning Goal(s): *Students will know and will be able to use their learning to:* (Content/ Skills)	**Content:** (Students will know…) ● the process for developing media. ● media message techniques. ● media design techniques. ● media technology techniques. **Skills:** (Students will be able to…) ● use a variety of AI tools to create media. ● determine the source and purpose of an influential image. ● use image editing applications to alter images. ● use messaging, design, and technical skills to create media with a clear influence. ● plan their concept, publish, and share the final product.

Unit Number and Title:	**Unit 3 -** Product Design
Duration:	~ 4-5 weeks
Resource(s):	Web-based digital photo editing applications Web-based video editing applications Web-based AI media generation applications Graphic Design and Programming platform Web-based coding applications
Unit Overview:	Students will develop a product. Students will focus on user interface, screen design, structure, usability, functionality, and presentation. Students will copyright their logo image using Creative Commons.
Learning Goals	
Standard(s):	**1.1d Technology Operations** Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use, and troubleshoot current technologies, and are able to transfer their knowledge to explore emerging technologies. **1.4 Innovative Designer** **1.4a** Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems. **1.4c** Students develop, test, and refine prototypes in a cyclical design process. **1.6 Creative Communicator** **1.6.a** Choose Platforms or Tools Students choose the appropriate platforms and digital tools for meeting the desired objectives of their creation or communication. **1.6.b** Original and Remixed Works Students create original works or responsibly repurpose or remix digital resources into new creations.

	1.6.c Communicate Complex Ideas Students use digital tools to visually communicate complex ideas to others. **1.6.d** Customize the Message Students publish or present content that customizes the message and medium for their intended audiences.
Essential Question(s):	● What messaging techniques are used to create media? ● What product are you creating, and what target audience are you selling to? ● What problem does your product solve? ● What tools/programs/resources do you need to create your product? ● How will you reach your target audience? ● What design (creative) techniques are used to create a digital message? ● What is the purpose of Creative Commons? ● How will you determine the success of your product? ● What can you change about your product and/or marketing to make it more successful?
Enduring Understanding(s):	Developing a product requires a comprehensive understanding of iterative design processes, and effective problem-solving skills to create a product for a target audience.
Learning Goal(s): *Students will know and will be able to use their learning to:* (Content/ Skills)	**Content:** (Students will know…) ● target audience needs/preferences. ● media design and messaging techniques. ● problem-solving skills to debug an application. ● user Interface (UI) and User Experience (UX) principles. ● best practices to ensure the safety and integrity of a product. **Skills:** (Students will be able to…) ● analyze problems, break them down into manageable parts, and develop effective solutions.

	● understand and utilize programming languages, development frameworks, and tools relevant to app development. ● ensure precision in design and testing to produce a high-quality app with minimal errors. ● work effectively with others, sharing tasks, and communicating clearly to achieve common goals in a development team. ● articulate ideas clearly and effectively, both in written documentation and verbal discussions. ● plan, organize, and manage time and resources to complete tasks efficiently and meet deadlines. ● adjust to new information, changing requirements, and unexpected challenges during development. ● prioritize the user experience in all app design and development aspects to create intuitive and satisfying user interactions. ● develop and execute comprehensive test plans to ensure the app functions correctly and meets user expectations. ● seek feedback to improve the design and functionalities to improve the app over time.