NEW MILFORD PUBLIC SCHOOLS

New Milford, Connecticut

Digital Photography
June 2018

New Milford Board of Education

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New Milford's Mission Statement

The mission of the New Milford Public Schools, a collaborative partnership of students, educators, family and community, is to prepare each and every student to compete and excel in an ever-changing world, embrace challenges with vigor, respect and appreciate the worth of every human being, and contribute to society by providing effective instruction and dynamic curriculum, offering a wide range of valuable experiences, and inspiring students to pursue their dreams and aspirations.

Digital Photography

Digital Photography is a fast paced course where students will learn the fundamental terms, techniques and practices of photography. Smart phones and/or digital cameras will be used to take weekly photographs and students will learn to manipulate these photos using Adobe Photoshop. Digital Media and Design is a new career path and photo manipulation is an essential part of that. Photography students will learn skills that will open up this new career and utilize their fine art skills while combining them with twenty-first century workplace skills. Homework will consist of taking photographs of specific subject matter and/or using specific techniques. Sample units include: Composition, Framing, Portraiture, Animals and Photo Editing. All students must have with a working digital camera or a smart phone with a working camera. Card readers will be provided, but students should bring and maintain their own device manuals and power cords. This is a half year course for all students in grades 9-12.

Unit # 1 Using a Digital Camera   **Pacing: 2 weeks 5-6 block classes**

Unit 2 - Adobe Photoshop - Basic Photo Corrections and Tool Selections   **Pacing: 3 weeks 7-8 block classes**

Unit 3 - Adobe Photoshop - Cloning, Filters & Advanced Compositing   **Pacing: 8 weeks 14-16 block classes**

Unit # 4 Historical and Modern Photography   **Pacing: 3 weeks, 7-9 block classes**

Unit # 5 Careers in Photography   **Pacing: 2 weeks 5-6 classes**

Stage 1 Desired Results

ESTABLISHED GOALS
- **The International Society for Technology in Education (ISTE)** standards will prepare students for a changeable, tech infused future, one where students are Empowered Learners, Digital Citizens, Knowledge Constructors, Innovative Designers, Computational Thinkers, Creative Communicators, and Global Collaborators.

- Provide a framework for students by instructing, teaching and learning in the digital age.

- Students will be prepared to thrive in a constantly evolving technological landscape, empower student voice, and ensure that learning is a student-driven process.

ISTE Standard #1 Empowered Learner
Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences.

**Connecticut Arts Framework
Program Goal #4**
Students will understand and use the language of Photography.

CCSS ELA College and Career Readiness Anchor Standards for Writing

Transfer

Students will be able to independently use their learning to…
Students will understand and use the materials, techniques, forms, language, notation and literature of Photography and how that affects modern society.

Meaning

UNDERSTANDINGS
Students will understand that…

- Cameras settings can be changed depending on the subject matter and the weather to get better photographs.

- There are many cell phone apps available that allow more settings for the cameras on them to be manipulated and photographs to be altered.

- Digital cameras and cell phones function on the same principles as film cameras.

- The elements of art are everywhere and a photograph / piece of artwork cannot be created without including at least one of them.

ESSENTIAL QUESTIONS
- How will you adjust the digital camera settings to obtain the best photograph?

- How will you know when the lighting is correct?

- How do you use a monopod/tripod?

- What is benefits of using the monopod/tripod?

Acquisition

Students will know…
- What is shutter speed, aperture and focus and how can these "creative controls" be manipulated to alter images?

Students will be skilled at…
- Identifying parts of the digital camera and cell phone camera:
  - Camera Body
  - Lens Adjustment

Research to Build and Present Knowledge **7.** Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation. **CCSS.ELA-LITERACY.W.9-10.3.E** Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative. Unit 1	● What are the similarities and differences between film and digital technologies? ● How does reflected light around us enter a digital camera and become recorded as a photographic image? ● The Elements of Art and Principles of Design and why are they significant to the composition of a photograph. ● The "Rule of Thirds" and why is it important to planning a composition. ● How important the Elements of Art and Principles of Design are in the world around us. ● The difference between composing a photograph and creating a composition for an image or painting.	○ Aperture Adjustment ○ Shutter speed control ○ White Balance ● Identifying the Elements of Art and Principles of Design ● Composing a photograph ● Using the rule of thirds

Unit 1

Stage 2 – Evidence		
Code	**Evaluative Criteria**	**Assessment Evidence**
TMA	● Students cultivate and manage their digital identity and reputation and know of the permanence of their actions in the digital world. ● Specific rubrics will be added during the 2018-19 school year.	**PERFORMANCE TASK(S):** ● Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways. ● Students will create a portfolio of photographs to demonstrate that they have mastered Color Balance, White Balance, Rule of Thirds - Framing, Lense settings and they will detail each step mastered in writing essay form to provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of their work. ● The students will include in their portfolios: ● Students will complete a diagram of their camera / cell phone identifying the key parts: Camera Body, Lens Adjustment, Aperture Adjustment, Shutter speed control, White Balance ● Students will create thumbnail sketches while drawing from life in order to practice the rule of thirds and elements of art. ● Students will share and test different camera control apps for cell phones and write mini reviews for them. The class will keep a running list of apps that work/don't work and whether they are good for Apple or Droid phones. ● Students will take photographs for homework and create contact sheets of those photographs to share and be reviewed.

		OTHER EVIDENCE:

Unit 1

Stage 3 – Learning Plan	

Code	*Pre-Assessment*
TMA	How students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.

	Summary of Key Learning Events and Instruction	**Progress Monitoring**
TMA	- Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes. - Students build networks and customize their learning environments in ways that support the learning process. - Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.	- Students will present contact sheets & thumbnail sketches for photograph planning and execution throughout the unit in preparation for the final portfolio. - Students will identify:Camera Body, Lens Adjustment, Aperture Adjustment, Shutter speed control, White Balance control on their own camera / camera phone. - Identifying the Elements of Art and Principles of Design in photographs they take & how to use the rule of

| | | thirds. |
| | | ● Students will evaluate their own photographs and the photographs of their classmates through the critique process. |

Unit 2 - Adobe Photoshop - Basic Photo Corrections and Tool Selections   A. Daley and J. Wilson   Pacing: 3 weeks 7-8 block classes

Stage 1 Desired Results	
ESTABLISHED GOALS	*Transfer*
ISTE Standard #2 Digital Citizen Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.	*Students will be able to independently use their learning to…* ● Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication. ● Carefully and analytically consider his/her own work and that of other students as well as professional photographers. ● Experience a variety of photographs made by historical and contemporary photographers.
CT Arts Framework Program Goal #4 Students will understand and use the language of Photography.	*Meaning*
	UNDERSTANDINGS *Students will understand that…* ● They can cultivate and manage	**ESSENTIAL QUESTIONS** **On the Adobe Photoshop Screen:**

CCSS.ELA-LITERACY.W.9-10.3.E Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.	their own digital identity and reputation and are aware of the permanence of their actions in the digital world. ● They will engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices. ● They can demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property. ● They can manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online. ● The process of critique is a positive way of learning and developing understanding. ● Design can be used to communicate ideas and emotions ● There is an enormous variety of traditional and cutting edge resources available to inspire and challenge ideas.	● What are the main areas of the Adobe Photoshop screen? ● How do you select from the toolbar and toolbar drop down menus? ● How do you enter text and make adjustments in the text? ● How do you make selections from the main menus and drop down menus? ● How do you adjust color? ● How do you enter a tutorial.
	Acquisition	
	Students will know… ● How are digital images are made in the camera? ● What is a pixel? ● Why is it important to understand the	***Students will be skilled at…*** ● Students create original works or responsibly repurpose or remix digital resources into new creations.

	concept of "resolution" in digital photography?	● Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
	● How are digital images transferred from the camera, to the computer, and finally printed?	
	● What are the different ways that digital images can be manipulated?	
	● What are the capabilities of computer software programs?	● Using the basic photo corrections and tool selections in Photoshop.
	● What are the limitations of computer software programs?	
	● How are photographic images used to communicate?	
	● What role do effective design and beauty play in photography?	
	● What makes a photograph a work of art?	
	● What are the limitations of perfection?	
	● What role might humor have in photography?	
	● How and why do we evaluate photographs?	
	● How does an individual's experience affect his or her interpretation of a photograph?	

Unit 2

Stage 2 – Evidence

Code	Evaluative Criteria	Assessment Evidence
TMA	● Students will manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online. ● Specific rubrics will be added during the 2018-19 school year.	**PERFORMANCE TASK(S):** ● Students will create a portfolio of photographs and include specific photographs in each section to show they have mastered Selections and Corrections, Fill and Stroke, Painting Tools, Drawing Tools, Lighting and Hue in Adobe Photoshop and they will detail each step mastered in writing to provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of their work. The students will include in their portfolios: ● Students will follow a tutorial to create a photo manipulation. ● Students will create an image using shape, color and selection tools. ● Students will enlarge and shrink the same photograph in a Photoshop document. They will label each image with the type tool and then print the image showing use of the type tool and knowledge of image resolution. ● Students will participate in a critique and use the DAIJ technique. ● Students will save finished TIFF, JPEG, PNG and PSD images to their USB drive and Google Drive. ● Students will rename their USB drives. ● Students will eject their USB drives from the PC. ● Students will find royalty free images and alter them in Photoshop with the basic tools.

		OTHER EVIDENCE:

Unit 2

Stage 3 – Learning Plan		
Code **TMA**	**Pre-Assessment** ● Students correctly publish or present content that customizes the message and medium for their intended audiences.	
TMA	**Summary of Key Learning Events and Instruction** ● Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes. ● Students build networks and customize their learning environments in ways that support the learning process. ● Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways. ● Save to their USB Drive. ● Properly Eject USB drive. ● Alter the size and resolution of images. ● Identify a royalty free image. ● Identify the purposes and appropriate times to use a TIFF, JPEG, PNG and PSD.	**Progress Monitoring** ● Students will present the next section of their portfolio that demonstrates Selections and Corrections, Fill and Stroke, Painting Tools, Drawing Tools, lighting and hue in photoshop in preparation for the final portfolio.

- Navigate the Adobe Photoshop workspace.
- Retouch damaged photographs using Photoshop.
- Blend 2 or more photographs together using Photoshop.
- Cover up or take out items from a photograph using Photoshop.
- Create their own artwork using Photoshop

Unit 3 - Adobe Photoshop - Cloning, Filters & Advanced Compositing   A. Daley and J. Wilson   Pacing: 8 weeks 14-16 block classes

Stage 1 Desired Results		
ESTABLISHED GOALS **ISTE Standard #6 Creative Communicator** Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. **CCSS.ELA-LITERACY.W.9-10.3.E** Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.	*Transfer*	
	Students will be able to independently use their learning to… Develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.	
	Meaning	
	UNDERSTANDINGS *Students will understand that…* You can communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.	**ESSENTIAL QUESTIONS** - What is the appropriate platforms and tools for meeting the desired objectives of their creation or communication? - How does Photoshop treat type? - How is a text layer the same or different from other layers in Photoshop? - What is clipping mask, and how do

		you make one from type?
	Acquisition	
	Students will know… ● How to break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.	*Students will be skilled at…* ● Creating original works or responsibly repurpose or remix digital resources into new creations.

Unit 3

Stage 2 – Evidence		
Code	**Evaluative Criteria**	**Assessment Evidence**

TMA	- Students develop, test and refine prototypes as part of a cyclical design process. - Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online. - Specific rubrics will be added during the 2018-19 school year.	**PERFORMANCE TASK(S):** - Students will know how to build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions. - Students will know how to and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems. - Students will create a portfolio of photographs to show they have mastered cloning, filters and advanced compositions and they will detail each step mastered in writing to provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of their work. - The students will include in their portfolios: Clone stamping to cover up part of an image (stain, wires, etc.). Clone stamp and patch tool to retouch an image (acne,scars, wrinkles, skin. Create a clipping mask using text and examples of filters to alter an image.

		OTHER EVIDENCE:

Unit 3

Stage 3 – Learning Plan		
Code TMA	**Pre-Assessment** Students will build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.	
TMA	**Summary of Key Learning Events and Instruction** **Students will learn how to:** - Use the clone stamp to cover up parts of or whole items in a photographic scene with objects that already exist in that scene. - Clone one layer and stamp it to another layer. - Change the opacity of the clone stamp to achieve different visual effects. - Use filters to change the appearance of parts of or entire photographs. - Work with masks and channels. - Create a quick mask. - Create type in a path.	**Progress Monitoring** - Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. - Students are tested on the fundamental concepts of technology operations, demonstrate the ability to

	● Create vertical text.	choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.
		● Students will present the next section of their portfolio that demonstrates Creating original works or responsibly repurposing or remixing digital resources into new creations.
		● Specific rubrics will be added during the 2018-19 school year.

Unit # 4 Historical and Modern Photography　　　　　　　**A. Daley and J. Wilson**　　　　**Pacing: 3 weeks, 7-9 block classes**

Stage 1 Desired Results

ESTABLISHED GOALS	*Transfer*	
ISTE Standard # 4 Innovative Designer Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.	***Students will be able to independently use their learning to…*** Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.	
	Meaning	
ISTE Standard #6 Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. **CCSS ELA College and Career Readiness Anchor Standards for Writing Research to Build and Present Knowledge** **7.** Conduct short as well as more sustained research projects based on focused questions,	UNDERSTANDINGS *Students will understand that…* Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others. ● Understand how the camera obscura works.	ESSENTIAL QUESTIONS ● How did people record images before photography? ● How did photography start? ● What existed before the film camera? ● What major changes were there between film cameras and digital

	cameras?
demonstrating understanding of the subject under investigation. **8.** Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. **9.** Draw evidence from literary or informational texts to support analysis, reflection, and research. **CCSS.ELA-LITERACY.W.9-10.3.E** Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.	● Understand the technological developments that have allowed photographs to be permanently recorded ● Understand how photography has played a role in war and politics. ● Understand how the audience for photography changes over time. ● Understand how Social media has changed how we use photography. ● Understand how the relationship between photography and "the truth" has often been an open question. Unit 4	

Acquisition		
	Students will know…	***Students will be skilled at…*** ● How to evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.
	● How does reflected light around us enter a camera and become recorded as a photographic image? ● How does the changing nature of technology affect the uses of photography? ● How does the passage of time (context) affect our understanding of photography? ● How does an individual's experience affect his or her interpretation of a photograph? ● What is the relationship between the photographer and the community (the class, the school, the town, the world)? ● What sort of social responsibility does	

	the photographic artist or journalist have? ● What are the purposes of documentation?	

Unit 4

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<tr><td>Code</td><td>Evaluative Criteria</td><td>Assessment Evidence</td></tr>
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TMA	● Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online. ● Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks. ● Specific rubrics will be added during the 2018-19 school year.	**PERFORMANCE TASK(S):** ● Students will research a historical photographer or photography style and create a portfolio of photographs related to their selection and they will detail each step mastered in writing to provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of their work. The students will include in their portfolios: ● Students will participate in a class activity creating the room into a pinhole camera.They will then write about that experience and how it worked. ● Students will complete a quiz on the history of photography. ● Students will find photographs that "tell a story" of American history or world history. (National Geographic photos, WWII, etc) ● Students will write about how the role of photography has changed since cell phones and social media.
		OTHER EVIDENCE:

Unit 4

Stage 3 – Learning Plan

Code TMA	Pre-Assessment
	Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.

TMA	Summary of Key Learning Events and Instruction	Progress Monitoring
	Students will learn how to: ● Identify photographs from several famous photographers. ● Identify photographs from several key photography movements. ● Take photographs that mimic a style of a famous photographer or photography style. ● Use Photoshop to alter images to appear older.	● Students will present the next section of their portfolio that demonstrates photographs taken or manipulated into a style of a historical photographer that they researched. ● Specific rubrics will be added during the 2018-19 school year.

Unit # 5 Careers in Photography   **A. Daley and J. Wilson**   **Pacing: 2 weeks 5-6 classes**

Stage 1 Desired Results

ESTABLISHED GOALS	
ESTABLISHED GOALS **# 5 Creative Career Communicator** Students communicate clearly and express themselves creatively using the platforms, tools, styles, formats and digital media appropriate to their career choices goals.	*Transfer*

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ESTABLISHED GOALS

 # 5 Creative Career Communicator
Students communicate clearly and express themselves creatively using the platforms, tools, styles, formats and digital media appropriate to their career choices goals.

CCSS ELA College and Career Readiness Anchor Standards for Writing
Research to Build and Present Knowledge
7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

CCSS.ELA-LITERACY.W.9-10.3.E
Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.

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Students will be able to independently use their learning to…

Develop and employ strategies for understanding careers and solving problems in ways that leverage the knowledge of careers in technological.

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<td colspan="2">Meaning</td>
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UNDERSTANDINGS
Students will understand that…
- Careers are decided by effectively by using a variety of models such as knowledge of careers, education level, financial need, and physical location requirements.

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ESSENTIAL QUESTIONS
- What is the design process to select a career?
- What are the appropriate platforms and tools for meeting the desired objectives for career selection?
- What is the role of the photographer?
- What is the role of the graphic designer?
- What is the role of the editor and publishing department?

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Students will know…
- How to separate careers into component parts, extract key information, and develop descriptive models to make the correct career decision.

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Students will be skilled at…
- Researching and knowing the necessary components of careers in the field of their choice.

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Unit # 5

Stage 2 – Evidence		
Code	**Evaluative Criteria**	**Assessment Evidence**
TMA	- Students manage their personal data to maintain digital privacy and security and are aware of the data-collection technology used to track their career navigation online. - Specific rubrics will be added during the 2018-19 school year.	**PERFORMANCE TASK(S):** - Students will build knowledge by actively exploring real-world issues, problems, develop ideas, theories to career answers and solutions. - Students will use the 12 step design process as part of their portfolio for generating ideas in the selection of a career and they will detail each step mastered in writing to provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of their work. - The students will include in their portfolios: - Students will create a list of at least 5 careers in the art/media field that interest them. - Students will complete a written research sheet for each job - average salary, education needed, etc., and keep track of everything in their "Digital Career Journal." - Students will write a "to do list" of things needed to attain a career in their #1 chosen field. - Students will email/contact local businesses in the area (if any) in their chosen field to ask questions and keep record of it in their course notebook. - The teacher will have members of the community in the chosen career fields to come into the class to speak and students will ask written questions that they have prepared in advance to ask that speaker..
		OTHER EVIDENCE:

Unit # 5

Stage 3 – LearStage 3 – Learning Planning Plan

Code TMA	Pre-Assessment
	Students will use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in career selection both locally and globally.

TMA	**Summary of Key Learning Events and Instruction**	**Progress Monitoring**
	Students will learn how to: ● Develop a format for career selection. ● Use their digital knowledge for designing the career framework. ● Use their communication skills to better their understanding of careers.	● Students will use digital tools to connect with learners from a variety of career backgrounds and ethnic diversities, engaging with them in ways that broaden their knowledge of career selections. ● Students will exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems. ● Students will present a "Digital Career Journal" documenting the required communication connections, essays, photographs and written text according to the course rubric and include that in their final portfolio. ● Specific rubrics will be added during the 2018-19 school year.