

Rumson-Fair Haven Regional High School Curriculum

Course: *Digital Imaging*

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Section I: Course Description

Students will Learn the mechanics of a digital camera and professional photographic techniques including F/stops, shutter speeds, lighting accommodations, depth of field, white balance, exposure settings, and the various types of digital files. Students will learn about photographic elements of art and principles of design, composition, and lighting. They will explore the history of photography, learning about its scientific and technological developments, important innovators in the field, and relevance within diverse cultural contexts. Students learn image techniques and digital manipulation using Adobe CS Software, teaching them how to archive, organize and optimize their photographs for print or web purposes. Students will learn how to manage and creatively alter digital images as well as critically analyze the use of visual media as a means of communication in our society today

Section II: NJSL: New Jersey Student Learning Standards/Learning Objectives

1. **2020 New Jersey Student Learning Standards – Computer Science and Design Thinking:**
 - “The ‘Intent and Spirit of the Computer Science and Design Thinking Standards’ is to focus on deep understanding of concepts that enable students to think critically and systematically about leveraging technology to solve local and global issues. Authentic learning experiences that enable students to apply content knowledge, integrate concepts across disciplines, develop computational thinking skills, acquire and incorporate varied perspectives, and communicate with diverse audiences about the use and effects of computing prepares New Jersey students for college and careers.”
2. **2016 English Language Arts Companions for Grades 9-10 (History, Social Studies, Science and Technical Subjects):**
 - The ELA Standards were revised in 2016, with the recommendations of teams of teachers, parents, administrators, supervisors and other stakeholders and reflect the strong beliefs that, “...Literacy must be recognized and guided in content areas so that students recognize the academic vocabulary, media representations, and power of language inherent in the work of scholars and experts...”
3. **Career Ready Practices:**
 - “Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.”
4. **2020 Career Readiness, Life Literacies, and Key Skills Standards (9.2 and 9.4):**
 - “Rapid advancements in technology and subsequent changes in the economy have created opportunities for individuals to compete and connect on a global scale. In this increasingly diverse and complex world, the successful entrepreneur or employee must not only possess the requisite education for specific industry pathways but also employability skills necessary to collaborate with others and manage resources effectively in order to establish and maintain stability and independence. This document outlines concepts and skills necessary for New Jersey’s students to thrive in an ever-changing world. Intended for integration throughout all K–12 academic and technical content areas, the New Jersey Student Learning Standards- Career Readiness, Life Literacies, and Key Skills (NJSL-CLKS) provides the framework for students to learn the concepts, skills, and practices essential to the successful navigation of career exploration and preparation, personal finances and digital literacy.”

- **Climate Change:** The state of New Jersey has mandated instruction in, “Climate Change across all content areas, leveraging the passion students have shown for this critical issue and providing them opportunities to develop a deep understanding of the science behind the changes and to explore the solutions our world desperately needs.”
- 5. **LGBT and Disabilities Law: N.J.S.A. 18A:35-4.35:**
 - A transformative approach to the inclusion of lessons and resources/texts on the contributions and issues concerning the LGBTQ+ population and people with disabilities will be implemented across all core subjects in accordance with state law: “A board of education shall include instruction on the political, economic, and social contributions of persons with disabilities and lesbian, gay, bisexual, and transgender people, in an appropriate place in the curriculum of middle school and high school students as part of the district’s implementation of the New Jersey Student Learning Standards (N.J.S.A.18A:35-4.36). A board of education shall have policies and procedures in place pertaining to the selection of instructional materials to implement the requirements of N.J.S.A. 18A:35-4.35.”
- 6. **Acquisition/development/refinement of the higher-order critical thinking skills aligned with the Revised Bloom’s Taxonomy of Cognitive Objectives**

Section III: Curriculum Modifications

The Digital Imaging *Curriculum* is subject to case-by-case modifications to support/advance the needs of all students, including special education students, English language learners, gifted students and those at risk of school failure. These modifications are based on Individualized Learning Programs (IEPs), recommendations made by the district’s English Language Learners (ELL) coordinator, feedback from members of the Intervention & Referral Services Team (*I&RS*) for at-risk students, and 504 Plans.

Coursework and assessments will be modified on an individual basis for students when necessary. Modifications may include but are not limited to:

- Small group instruction
- One on one instruction
- Independent work stations
- Use of graphic organizers
- Interest inventories and questionnaires
- Audio resources to complement written texts and concepts
- Visual resources to complement written texts and concepts
- Extra time on assessments and large scale projects
- Reduced length of written assignments
- Large projects broken into smaller tasks and timelines
- Tiered Instruction
- Individual help during practice
- Diagrams and color coding for visual learners
- Verbal and written directions for visual and auditory learners
- Provided class notes
- Preferential seating
- Spelling not penalized
- Varied supplemental activities
- Assessments delivered orally

Section IV: Preparation for Standardized Testing

Instruction in Digital Imaging is aligned with the requirements of state and national standardized assessments, including the *NJSLA*, the *ACT*, the *PSAT* and the *SAT*. The *End of Marking Period Assessments* for Digital Imaging also demonstrate alignment with the aforesaid standardized assessments.

Section V: Curriculum Pacing Guide

Curriculum Pacing Guide	
Course Title: <i>Digital Imaging</i>	Grade Level: 10th 11th and 12th
Unit 1: History of Photography	2 Weeks
Unit 2: The Digital Camera	4 Weeks
Unit 3: Digital Camera Operation	8 Weeks
Unit 4: Digital Photo Composition	6 Weeks
Unit 5: Digital Output	2 Weeks
Unit 6: PhotoShop CS	6 Weeks
Unit 7: Photographic Composition	2 Weeks
Unit 8: Career Options in Digital Photography	2 Weeks
Unit 9: Digital Video Image Module	4 Weeks

Section VI: Primary Texts and Year Long Instructional Resources

The following texts and instructional resources are employed in Digital Imaging:

- *Adobe CS6 Educational Suite*
- *Auto Desk LE Autocad*
- *Google Classroom*

Section VII: Grading Formula and Assessment Modes

Marking period grades in Digital Imaging are determined via a percentage weighting model. The specific grading categories and weightings of each will be determined prior to the start of each academic year and will be published in the posted/distributed course syllabi.

Section VIII: Unit Templates

The following unit templates have been established for the Digital Imaging Curriculum by the *Industrial Technology* Instructional Team:

Unit 1: History of Photography		
Unit Summary		
Students will study key photographic works, movements, styles, concepts, and important practitioners of the medium from 1839 to the present, will help students attain an understanding and appreciation of photography. Students will study the historical and cultural contexts for the production of photographs. Students will explore camera obscura and lens theory.		
Standards/Core Ideas/Performance Expectations		
The state standards outlined below, and established by New Jersey Department of Education, will guide instruction throughout this unit in Digital Imaging:		
<ul style="list-style-type: none"> ● <i>2020 New Jersey Student Learning Standards: Computer Science and Design Thinking</i> <ul style="list-style-type: none"> ○ 8.1.12.DA.2, 8.2.12.ED.1, 8.2.12.ED.4, 8.2.12.ED.5, 8.2.12.NT.1, 8.2.12.NT.2 ● <i>2016 New Jersey Student Learning Standards: English Language Arts Companions for Grades 9-10</i> <ul style="list-style-type: none"> ○ NJLSA.R7, RST.9-10.3, RST.9-10.4, NJLSA.W4, NJLSA.W7, WHST.9-10.6, WHST.9-10.7, WHST.9-10.10 ● <i>2020 New Jersey Student Learning Standards: Career Readiness, Life Literacies and Key Skills</i> <ul style="list-style-type: none"> ○ 9.2.12.CAP.6, 9.2.12.CAP.8, 9.4.12.CI.1, 9.4.12.CI.2, 9.4.12.CT.1, 9.4.12.CT.2, 9.4.12.DC.3, 9.4.12.DC.7, 9.4.12.TL.1, 9.4.12.TL.3, 9.4.12.TL.4, 9.4.12.IML.1, 9.4.12.IML.2 ○ CRP1, CRP2, CRP3, CRP4, CRP5, CRP6, CRP7, CRP8, CRP9, CRP10, CRP11, CRP12 		
Unit Essential Questions	Unit Enduring Understandings	
<ul style="list-style-type: none"> ● What were the early attempts to produce photographic images? ● Who were important inventors and what were inventions that led to advancements in photography? ● Describe early challenges to photographers ● How does early photography compare to today? 	<ul style="list-style-type: none"> ● The camera obscura was one of the first ways of producing an image. ● Niepce had the earliest fixed images. Louis Daguerre created a faster process for exposure of photographs. Glass plates became useful in the 1850s while roll films were processed by the mid-20th century. Digital photography has emerged in the 21st century ● Materials and means of exposing the photographs have always been a challenge to photographers. As chemical processes were advanced, so were photographs. ● Early photography laid the groundwork for the art of photography today, but the means and technology have transcended the art to a newer form with digital photography. 	
Evidence of Learning		
Formative Assessment:	Summative Assessment:	Resources Needed:
<ul style="list-style-type: none"> ● Timeline of photography ● homework ● Internet Research 	<ul style="list-style-type: none"> ● History of photography worksheet ● History of photography exam 	<ul style="list-style-type: none"> ● Notebook ● Internet/Laptop
Unit 2: The Digital Camera		
Unit Summary		

Students will become familiar with types of digital cameras, lenses, and the use of the camera features. Students will be able to identify the different types of Digital Cameras and their advantages and disadvantages. Students will understand shutter and aperture control and its uses in creating photographs.

Standards/Core Ideas/Performance Expectations

The state standards outlined below, and established by New Jersey Department of Education, will guide instruction throughout this unit in Digital Imaging:

- *2020 New Jersey Student Learning Standards: Computer Science and Design Thinking*
 - 8.1.12.DA.2, 8.2.12.ED.1, 8.2.12.ED.4, 8.2.12.ED.5, 8.2.12.NT.1, 8.2.12.NT.2
- *2016 New Jersey Student Learning Standards: English Language Arts Companions for Grades 9-10*
 - NJLSA.R7, RST.9-10.3, RST.9-10.4, NJLSA.W4, NJLSA.W7, WHST.9-10.6, WHST.9-10.7, WHST.9-10.10
- *2020 New Jersey Student Learning Standards: Career Readiness, Life Literacies and Key Skills*
 - 9.2.12.CAP.6, 9.2.12.CAP.8, 9.4.12.CI.1, 9.4.12.CI.2, 9.4.12.CT.1, 9.4.12.CT.2, 9.4.12.DC.3, 9.4.12.DC.7, 9.4.12.TL.1, 9.4.12.TL.3, 9.4.12.TL.4, 9.4.12.IML.1, 9.4.12.IML.2
 - CRP1, CRP2, CRP3, CRP4, CRP5, CRP6, CRP7, CRP8, CRP9, CRP10, CRP11, CRP12

Unit Essential Questions		Unit Enduring Understandings	
<ul style="list-style-type: none"> ● What are the benefits of using a digital camera over a traditional camera? ● What is an SLR camera and how does it differ from a point and shoot? ● How many components does a camera have? ● How do you use the various controls on the camera to create different effects? ● How does shutter and aperture control affect the quality of a digital photograph? 		<ul style="list-style-type: none"> ● Traditional cameras record images on film while digital cameras record images electronically. ● An SLR camera will have a better quality of pictures than a point and shoot. The SLR will have a longer battery life. Most importantly, the SLR will let you tweak settings for best performance, whereas point and shoots have less flexibility. ● All cameras have a body, a shutter, a lens, a lens aperture and image sensor. ● Students will become familiar with the controls on the SLR cameras and how they affect different images and settings including sports mode, landscape, portrait, etc. ● The amount of, and direction of, light on a scene to be photographed will affect the visual quality of the photograph being made 	
Evidence of Learning			
Formative Assessment: <ul style="list-style-type: none"> ● Project application of box camera to establish basic photo principals ● Construct a basic shoe box camera ● Explore camera lens theory related to camera construction ● Camera use outside class ● Camera lighting assignment 	Summative Assessment: <ul style="list-style-type: none"> ● Camera use worksheet ● Digital camera exam ● Completed use assignments 	Resources Needed: <ul style="list-style-type: none"> ● Digital SLR Camera ● Internet\Laptop 	

Unit 3: Digital Camera Operation

Unit Summary		
Students will understand how traditional photographic concepts apply to digital photography. Students understand the use of the digital camera and how to integrate the elements of art and principles of design to create a sophisticated photograph.		
Standards/Core Ideas/Performance Expectations		
The state standards outlined below, and established by New Jersey Department of Education, will guide instruction throughout this unit in Digital Imaging:		
<ul style="list-style-type: none"> ● <i>2020 New Jersey Student Learning Standards: Computer Science and Design Thinking</i> <ul style="list-style-type: none"> ○ 8.1.12.DA.2, 8.2.12.ED.1, 8.2.12.ED.4, 8.2.12.ED.5, 8.2.12.NT.1, 8.2.12.NT.2 ● <i>2016 New Jersey Student Learning Standards: English Language Arts Companions for Grades 9-10</i> <ul style="list-style-type: none"> ○ NJLSA.R7, RST.9-10.3, RST.9-10.4, NJLSA.W4, NJLSA.W7, WHST.9-10.6, WHST.9-10.7, WHST.9-10.10 ● <i>2020 New Jersey Student Learning Standards: Career Readiness, Life Literacies and Key Skills</i> <ul style="list-style-type: none"> ○ 9.2.12.CAP.6, 9.2.12.CAP.8, 9.4.12.CI.1, 9.4.12.CI.2, 9.4.12.CT.1, 9.4.12.CT.2, 9.4.12.DC.3, 9.4.12.DC.7, 9.4.12.TL.1, 9.4.12.TL.3, 9.4.12.TL.4, 9.4.12.IML.1, 9.4.12.IML.2 ○ CRP1, CRP2, CRP3, CRP4, CRP5, CRP6, CRP7, CRP8, CRP9, CRP10, CRP11, CRP12 		
Unit Essential Questions	Unit Enduring Understandings	
<ul style="list-style-type: none"> ● How do traditional photographic concepts apply to digital photography? ● How does a photographer integrate the elements of art and principles of design to create a sophisticated photograph. ● How to understand the use of the digital camera. ● How does the photographer operate the camera controls and handle the camera properly? 	<ul style="list-style-type: none"> ● Students will apply comprehension and skill in incorporating the elements of art and principles of design to generate multiple solutions and effectively solve a variety of visual art problems -- including traditional photographic concepts ● Students will use subject matter, symbols, ideas and themes that demonstrate knowledge of contexts and culture and aesthetic values to communicate intended meaning. ● Students will be guided through the use, handling, and camera controls for a digital camera including: Camera manipulation, light meters, aperture and shutter speeds, focusing, framing, composition, contrast, clarity and center of interest when framing a photograph. 	
Evidence of Learning		
Formative Assessment:	Summative Assessment:	Resources Needed:
<ul style="list-style-type: none"> ● Homework ● Digital images ● Handouts on shutter speeds, f-stops, digital camera icon settings 	<ul style="list-style-type: none"> ● Quiz on shutter speeds, f-stops, and icon settings ● Quiz on Digital camera use 	<ul style="list-style-type: none"> ● Digital SLR ● Internet/Laptop

Unit 4: Digital Photo Composition
Unit Summary
After their introduction to the digital camera itself, the students will now begin to walk through particular situations and settings on the camera that will aid in composing different types of digital photographs. Students will become even more familiar with types of shutter speeds, aperture control, and various photo techniques as related to photo composition. These are the types of things that may not be available on students' smartphone cameras and it is important for them to notice the differences.

Standards/Core Ideas/Performance Expectations

The state standards outlined below, and established by New Jersey Department of Education, will guide instruction throughout this unit in Digital Imaging:

- *2020 New Jersey Student Learning Standards: Computer Science and Design Thinking*
 - 8.1.12.DA.2, 8.2.12.ED.1, 8.2.12.ED.4, 8.2.12.ED.5, 8.2.12.NT.1, 8.2.12.NT.2
- *2016 New Jersey Student Learning Standards: English Language Arts Companions for Grades 9-10*
 - NJLSA.R7, RST.9-10.3, RST.9-10.4, NJLSA.W4, NJLSA.W7, WHST.9-10.6, WHST.9-10.7, WHST.9-10.10
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 - CRP1, CRP2, CRP3, CRP4, CRP5, CRP6, CRP7, CRP8, CRP9, CRP10, CRP11, CRP12

Unit Essential Questions

- How do you determine proper exposure using the built in light meter?
- How do you set appropriate aperture/shutter speed combinations for different situations?
- What type of artificial lighting is used in photography?
- What techniques are used to stop action?
- What are the advantages & disadvantages of using the camera's built in flash?

Unit Enduring Understandings

- Students will understand the basic characteristics of light as they affect photography and use the light meter to determine amount of exposure necessary
- Exposure is affected by the interrelationship of aperture, shutter speed, and ISO rating and will be dependent on the light available and other parameters of the wanted photograph.
- Filters are also used to control lighting in digital photography.
- Using a very fast shutter speed can stop action on a digital camera--it can capture very quick motions.
- The flash has little power and is not directional, leading to shadows, but it can fill in light and help fill in already-apparent shadows. It can also help catch action.

Evidence of Learning

Formative Assessment:

- Lighting Assignment
- Studio Motion Assignment
- Texture Assignment
- homework
- performance activities

Summative Assessment:

- Required Photo Assignments
- Composition quiz

Resources Needed:

- Digital SLR
- Internet \Laptop

Unit 5: Digital Output

Unit Summary

Students will become familiar with file formats, types of printers, and output formats. Not only is it important for students to know how to take a great photograph using the components on the digital camera, it is also ever more important for students to know how those files can now be stored--or manipulated. Computer software programs will be explored for Photo manipulation, correction and storage. Students should come away with background information on how to store and manipulate pictures after they are taken.

Standards/Core Ideas/Performance Expectations

The state standards outlined below, and established by New Jersey Department of Education, will guide instruction throughout this unit in Digital Imaging:

<ul style="list-style-type: none"> ● <i>2020 New Jersey Student Learning Standards: Computer Science and Design Thinking</i> <ul style="list-style-type: none"> ○ 8.1.12.DA.2, 8.2.12.ED.1, 8.2.12.ED.4, 8.2.12.ED.5, 8.2.12.NT.1, 8.2.12.NT.2 ● <i>2016 New Jersey Student Learning Standards: English Language Arts Companions for Grades 9-10</i> <ul style="list-style-type: none"> ○ NJLSA.R7, RST.9-10.3, RST.9-10.4, NJLSA.W4, NJLSA.W7, WHST.9-10.6, WHST.9-10.7, WHST.9-10.10 ● <i>2020 New Jersey Student Learning Standards: Career Readiness, Life Literacies and Key Skills</i> <ul style="list-style-type: none"> ○ 9.2.12.CAP.6, 9.2.12.CAP.8, 9.4.12.CI.1, 9.4.12.CI.2, 9.4.12.CT.1, 9.4.12.CT.2, 9.4.12.DC.3, 9.4.12.DC.7, 9.4.12.TL.1, 9.4.12.TL.3, 9.4.12.TL.4, 9.4.12.IML.1, 9.4.12.IML.2 ○ CRP1, CRP2, CRP3, CRP4, CRP5, CRP6, CRP7, CRP8, CRP9, CRP10, CRP11, CRP12 		
Unit Essential Questions	Unit Enduring Understandings	
<ul style="list-style-type: none"> ● How do we judge which one to keep, print, and delete? ● What criteria can we use to help us with our decision? 	<ul style="list-style-type: none"> ● Students will be able to find which of their multitude of pictures are the “best.” Students are also being introduced to the qualities of “good” photographs and how to set up a photograph once the mastery of using a camera has been accomplished. ● Students will look for sharpness, light and exposure, composition, contrast, colors, depth of field, and clarity when sifting through their photographs. 	
Evidence of Learning		
Formative Assessment: <ul style="list-style-type: none"> ● Visual review and commentary on visual quality of photographs made during student photo making ● Appropriate use of camera controls and camera handling & maintenance are evaluated in each individual photo project assignment ● homework ● performance activities 	Summative Assessment: <ul style="list-style-type: none"> ● Digital output activity 	Resources Needed: <ul style="list-style-type: none"> ● internet/laptop ● Adobe Suite

Unit 6:
Photoshop CS
Unit Summary
<p>Students will demonstrate a knowledge of computer hardware, software applications, and output and storage devices. Once students have learned how to store and change the file types of their photographs, they will then be able to begin understanding the programs available to manipulate and change digital photographs after they are taken. Within the Adobe Suite of products, the students will process through several different applications of Adobe Photoshop using their own images and ones found on the internet.</p>
Standards/Core Ideas/Performance Expectations
<p>The state standards outlined below, and established by New Jersey Department of Education, will guide instruction throughout this unit in Digital Imaging:</p> <ul style="list-style-type: none"> ● <i>2020 New Jersey Student Learning Standards: Computer Science and Design Thinking</i> <ul style="list-style-type: none"> ○ 8.1.12.DA.2, 8.2.12.ED.1, 8.2.12.ED.4, 8.2.12.ED.5, 8.2.12.NT.1, 8.2.12.NT.2 ● <i>2016 New Jersey Student Learning Standards: English Language Arts Companions for Grades 9-10</i>

<ul style="list-style-type: none"> ○ NJLSA.R7, RST.9-10.3, RST.9-10.4, NJLSA.W4, NJLSA.W7, WHST.9-10.6, WHST.9-10.7, WHST.9-10.10 ● <i>2020 New Jersey Student Learning Standards: Career Readiness, Life Literacies and Key Skills</i> <ul style="list-style-type: none"> ○ 9.2.12.CAP.6, 9.2.12.CAP.8, 9.4.12.CI.1, 9.4.12.CI.2, 9.4.12.CT.1, 9.4.12.CT.2, 9.4.12.DC.3, 9.4.12.DC.7, 9.4.12.TL.1, 9.4.12.TL.3, 9.4.12.TL.4, 9.4.12.IML.1, 9.4.12.IML.2 ○ CRP1, CRP2, CRP3, CRP4, CRP5, CRP6, CRP7, CRP8, CRP9, CRP10, CRP11, CRP12 		
Unit Essential Questions		Unit Enduring Understandings
<ul style="list-style-type: none"> ● How can we use, save and print our digital images? ● How can we make changes to improve our digital images? 		<ul style="list-style-type: none"> ● Images can be saved as TIFF, JPEG, GIF, PNG and Raw Image files, each with different uses. The PSD Photoshop format will be very useful for students at this point. ● The focus will now be on the Photoshop applications and how to improve and alter digital images. This includes: cropping and resizing, adjusting light and color, removing unwanted objects, cut out and make selections, combine images into a new creative project, along with drawing and painting.
Evidence of Learning		
Formative Assessment: <ul style="list-style-type: none"> ● Use image editing software. ● Connect, transfer and color manage photographs for successful output of images. ● Integrate scanned images into photographs. ● Control size and output of images. ● homework 	Summative Assessment: <ul style="list-style-type: none"> ● Photoshop CS Introduction projects 	Resources Needed: <ul style="list-style-type: none"> ● Photoshop CS Suite ● Computer

Unit 7:
Photographic Composition
Unit Summary
<p>After students have begun to understand how to use the digital cameras and how to manipulate some of the images in Photoshop, an emphasis will now be made on the Composition of photographs. In photography, composition is what separates a spectacular shot from a regular one. Students become familiar with lighting, special effect techniques, rules of composition, Rule of thirds, night photography and frame composition. All of these facets will help students become more familiar with focusing on how to take even better digital images.</p>
Standards/Core Ideas/Performance Expectations
<p>The state standards outlined below, and established by New Jersey Department of Education, will guide instruction throughout this unit in Digital Imaging:</p> <ul style="list-style-type: none"> ● <i>2020 New Jersey Student Learning Standards: Computer Science and Design Thinking</i> <ul style="list-style-type: none"> ○ 8.1.12.DA.2, 8.2.12.ED.1, 8.2.12.ED.4, 8.2.12.ED.5, 8.2.12.NT.1, 8.2.12.NT.2 ● <i>2016 New Jersey Student Learning Standards: English Language Arts Companions for Grades 9-10</i> <ul style="list-style-type: none"> ○ NJLSA.R7, RST.9-10.3, RST.9-10.4, NJLSA.W4, NJLSA.W7, WHST.9-10.6, WHST.9-10.7, WHST.9-10.10 ● <i>2020 New Jersey Student Learning Standards: Career Readiness, Life Literacies and Key Skills</i>

<ul style="list-style-type: none"> ○ 9.2.12.CAP.6, 9.2.12.CAP.8, 9.4.12.CI.1, 9.4.12.CI.2, 9.4.12.CT.1, 9.4.12.CT.2, 9.4.12.DC.3, 9.4.12.DC.7, 9.4.12.TL.1, 9.4.12.TL.3, 9.4.12.TL.4, 9.4.12.IML.1, 9.4.12.IML.2 ○ CRP1, CRP2, CRP3, CRP4, CRP5, CRP6, CRP7, CRP8, CRP9, CRP10, CRP11, CRP12 		
Unit Essential Questions		Unit Enduring Understandings
<ul style="list-style-type: none"> ● What are the important components of photograph composition? ● What are composition techniques? 		<ul style="list-style-type: none"> ● Students will understand how lines, shape and form, value, space, color, and texture all affect a photograph's composition. ● Students will understand and use techniques including: selective focus, simplicity, rules and ratios, rule of thirds, the golden spiral and triangles, baroque and sinister diagonals, perspective, focused light, and natural framing.
Evidence of Learning		
Formative Assessment: <ul style="list-style-type: none"> ● identifying parts of the composition of a photograph ● homework ● performance activities 	Summative Assessment: <ul style="list-style-type: none"> ● Composition of photographs project 	Resources Needed: <ul style="list-style-type: none"> ● Digital SLR ● Internet \Laptop

Unit 8:	
Career Options in Digital Photography	
Unit Summary	
<p>Students will explore how a photography job can take many different forms. Some photographers freelance, others run their own studios or work for companies as salaried employees. Photographers can also further customize their careers by choosing to specialize in a certain kind of photography. From wedding photography to commercial photography to photojournalism, students will have an understanding of how digital photography can expand career opportunities.</p>	
Standards/Core Ideas/Performance Expectations	
<p>The state standards outlined below, and established by New Jersey Department of Education, will guide instruction throughout this unit in Digital Imaging:</p> <ul style="list-style-type: none"> ● <i>2020 New Jersey Student Learning Standards: Computer Science and Design Thinking</i> <ul style="list-style-type: none"> ○ 8.1.12.DA.2, 8.2.12.ED.1, 8.2.12.ED.4, 8.2.12.ED.5, 8.2.12.NT.1, 8.2.12.NT.2 ● <i>2016 New Jersey Student Learning Standards: English Language Arts Companions for Grades 9-10</i> <ul style="list-style-type: none"> ○ NJLSA.R7, RST.9-10.3, RST.9-10.4, NJLSA.W4, NJLSA.W7, WHST.9-10.6, WHST.9-10.7, WHST.9-10.10 ● <i>2020 New Jersey Student Learning Standards: Career Readiness, Life Literacies and Key Skills</i> <ul style="list-style-type: none"> ○ 9.2.12.CAP.6, 9.2.12.CAP.8, 9.4.12.CI.1, 9.4.12.CI.2, 9.4.12.CT.1, 9.4.12.CT.2, 9.4.12.DC.3, 9.4.12.DC.7, 9.4.12.TL.1, 9.4.12.TL.3, 9.4.12.TL.4, 9.4.12.IML.1, 9.4.12.IML.2 ○ CRP1, CRP2, CRP3, CRP4, CRP5, CRP6, CRP7, CRP8, CRP9, CRP10, CRP11, CRP12 	
Unit Essential Questions	Unit Enduring Understandings
<ul style="list-style-type: none"> ● How has photography evolved? ● What are occupations in the field? ● How can students plan for further training in the field of Digital Photography? 	<ul style="list-style-type: none"> ● Photography is an ever-evolving visual communications tool for everybody and allows the picture-maker (photographer) to convey his/her views through artistic expression, journalistic story-telling, or to further convey subjects' meanings/views through the recording of such expression. ● Digital Photography is the latest process used to record and present visual images and uses electronic circuitry and computer technology along with traditional mechanical

		<p>devices and systems to accomplish the recording and presenting</p> <ul style="list-style-type: none"> • Occupations in the field include: Photojournalist, fine art photographer, commercial/industrial photographer, studio/portrait photographer, and freelance photographer. • Students can continue to refine their craft by using systems such as Photoshop on their own or taking classes at the college level.
Evidence of Learning		
<p>Formative Assessment:</p> <ul style="list-style-type: none"> • Research occupations in digital photography assignment • homework • Career worksheet 	<p>Summative Assessment:</p> <ul style="list-style-type: none"> • Classwide discussion of photography careers. 	<p>Resources Needed:</p> <ul style="list-style-type: none"> • Internet/Laptop

Unit 9: Digital Video Imaging Module	
Unit Summary	
<p>Students will plan, prepare, design, develop, edit and evaluate video from a communication and entertainment perspective. As a capstone piece to this course which will bring together most of what the students have learned this year, students will prepare a Digital Video. Students will create video productions that will demonstrate their knowledge of camera angles, production planning and sequencing. Taking the next step from still photography to digital video imaging is an excellent way to blend together students' abilities with the digital camera along with their editing and knowledge of photography with the Adobe Premier application.</p>	
Standards/Core Ideas/Performance Expectations	
<p>The state standards outlined below, and established by New Jersey Department of Education, will guide instruction throughout this unit in Digital Imaging:</p> <ul style="list-style-type: none"> • <i>2020 New Jersey Student Learning Standards: Computer Science and Design Thinking</i> <ul style="list-style-type: none"> ○ 8.1.12.DA.2, 8.2.12.ED.1, 8.2.12.ED.4, 8.2.12.ED.5, 8.2.12.NT.1, 8.2.12.NT.2 • <i>2016 New Jersey Student Learning Standards: English Language Arts Companions for Grades 9-10</i> <ul style="list-style-type: none"> ○ NJLSA.R7, RST.9-10.3, RST.9-10.4, NJLSA.W4, NJLSA.W7, WHST.9-10.6, WHST.9-10.7, WHST.9-10.10 • <i>2020 New Jersey Student Learning Standards: Career Readiness, Life Literacies and Key Skills</i> <ul style="list-style-type: none"> ○ 9.2.12.CAP.6, 9.2.12.CAP.8, 9.4.12.CI.1, 9.4.12.CI.2, 9.4.12.CT.1, 9.4.12.CT.2, 9.4.12.DC.3, 9.4.12.DC.7, 9.4.12.TL.1, 9.4.12.TL.3, 9.4.12.TL.4, 9.4.12.IML.1, 9.4.12.IML.2 ○ CRP1, CRP2, CRP3, CRP4, CRP5, CRP6, CRP7, CRP8, CRP9, CRP10, CRP11, CRP12 	
Unit Essential Questions	Unit Enduring Understandings
<ul style="list-style-type: none"> • How are advanced editing programs different than consumer level programs? • How is video imported into the computer? • How can video be manipulated in a non-linear way? 	<ul style="list-style-type: none"> • Advanced editing programs are more powerful, easier to use, and generally has more features available than consumer level programs which are mostly limited in scope. • Video, like photographs, can be imported to the computer via a proper USB cable, or you can use a removable disk to store and transfer larger video files. • Video can be manipulated in a non-linear way when the video editing software allows for editors to put in audio and

<ul style="list-style-type: none"> • How do microphones, lighting, and camera functions impact a video production? • Why is it important for a camera operator to understand the camera functions and shot types? 	<p>different video files on multiple tracks in any sequence, rather than one after the other only. This leads to overlap.</p> <ul style="list-style-type: none"> • All previously learned camera options will have an impact on what is recorded in the video scene--so an operator needs to know what they are looking for in the shot using the appropriate camera functions. The new aspects of microphones and lighting affect the sound and visual quality of a digital video based on placement. 	
Evidence of Learning		
<p>Formative Assessment:</p> <ul style="list-style-type: none"> • Learn to operate a video camera. • Capture well composed video images. • Capture great sound. • Edit video and audio into a compelling story • homework • Internet Research 	<p>Summative Assessment:</p> <ul style="list-style-type: none"> • History of digital video imaging worksheet • History of digital video imaging test • Digital Video project 	<p>Resources Needed:</p> <ul style="list-style-type: none"> • Notebook • Internet/Laptop • Adobe Premiere

Section IX: Unit Reflection

The *Digital Imaging* Instructional Team must confer upon the completion of each instructional unit in the *Digital Imaging Curriculum* and rate the degrees to which the instructional units meet performance criteria established by the New Jersey Department of Education using the *Unit Reflection Form*. Completed unit reflection forms must be submitted to the Department Supervisor for approval upon completion of curriculum implementation with a complementing list of suggested modifications to the *Digital Imaging Curriculum*.

Lesson Activities:			
	Strongly	Moderately	Weakly
Foster student use of technology as a tool to develop critical thinking, creativity and innovation skills;			
Are challenging and require higher order thinking and problem solving skills;			
Allow for student choice;			
Provide scaffolding for acquiring targeted knowledge/skills;			
Integrate global perspectives;			
Integrate 21st century skills;			
Provide opportunities for interdisciplinary connection and transfer of knowledge and skills;			

Are varied to address different student learning styles and preferences;			
Are differentiated based on student needs;			
Are student-centered with teacher acting as a facilitator and co-learner during the teaching and learning process;			
Provide means for students to demonstrate knowledge and skills and progress in meeting learning goals and objectives;			
Provide opportunities for student reflection and self-assessment;			
Provide data to inform and adjust instruction to better meet the varying needs of learners;			