

FREEHOLD REGIONAL HIGH SCHOOL DISTRICT

OFFICE OF CURRICULUM AND INSTRUCTION

TECHNOLOGY EDUCATION DEPARTMENT

DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN

1

Grade Level: 9-12

Credits: 5

BOARD OF EDUCATION ADOPTION DATE:

AUGUST 25, 2008

[SUPPORTING RESOURCES AVAILABLE IN DISTRICT RESOURCE SHARING](#)

APPENDIX A: ACCOMMODATIONS AND MODIFICATIONS

APPENDIX B: ASSESSMENT EVIDENCE

APPENDIX C: INTERDISCIPLINARY CONNECTIONS

Course Philosophy

Digital Media Photographic Design I is an introductory course designed to provide students with a unique opportunity of integrating the latest trends in multimedia computer graphics and digital photography. Students will gain hands-on experience through the creation of a variety of products, prototypes and visual presentations similar to what is done in professional industries. Final publications will be produced electronically as comprehensive presentations, as mechanicals for reproduction and portfolio presentation. Exploration in various applications of digital photography will also be introduced.

Course Description

Digital Media and Photographic Design is a five credit elective course open to all students 9-12. There are no prerequisites; however prospective students should consider their personal interest and abilities in this area. The course constitutes an excellent career guidance experience due to the exploratory nature and variety of content. Occupational information is presented to help students decide whether or not to pursue additional study directed towards a related career or simply to enhance vocational interest.

**Freehold Regional High School District
Course Map**

DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I

Relevant Standards ¹	Enduring Understandings	Essential Questions	Assessments		
			Diagnostic (before)	Formative (during)	Summative (after)
9.1.12B4, 9.2.12F1-5	Following safety procedures and using personal protection equipment will reduce the risk of injury.	<ul style="list-style-type: none"> What are the safety concerns to be considered when working in a lab setting in school or on the job? What protection can be used in a laboratory environment? 	Signed safety contracts.	Ongoing observations of students during safety situations.	Performance test to include safety scenarios and emergency situations.
9.2.12B2-3, 9.2.12D3-5	Self-management is a key to maximizing efficiency and preventing accidents.	<ul style="list-style-type: none"> What should be part of an effective safety program? 		Student self-assessment of safety procedures.	
9.1.12A2-3, 9.1.12B4-5	Working with other people is an important skill for life and the workplace.	<ul style="list-style-type: none"> What characteristics are essential to a functional team? What are the benefits of working in a team environment as opposed to individually? 	Do Now Ice Breaker Activity	Ongoing observations of students during group situations.	Self and Peer Assessment
9.1.12B4, 8.1.12A8	Knowing how to create, save, retrieve, and produce electronic work is essential in the work place.	<ul style="list-style-type: none"> How is work done on a computer created and stored? What is the benefit of a computer network? 	Do Now	Ongoing observations of students during assignments.	Project Based Learning – Assessed by Rubric
1.3.12D.1, 1.4.12A.2	The effectiveness of design, photography and artwork is influenced by the principles and elements of design.	<ul style="list-style-type: none"> Why is it important to incorporate the design principles in all artwork and designs? 	Do Now – Upside Down Drawing	Ongoing observations of students during assignments.	
8.1.12B9, 8.1.12B11, 8.2..12B1	The design process is a series of steps taken in order to create a product or solve a problem.	<ul style="list-style-type: none"> How is the design process carried out, and what are the steps? 	Pre-Test	Ongoing observations of students during assignments.	

¹ Including computer / information literacy, cross content work place readiness standards, and other relevant content area standards

1.1.12A1, 1.2.12D3	Color theory includes the physical description of individual colors as well as relationship between individual and groups of colors.	<ul style="list-style-type: none"> • How are colors grouped? • How can colors be made lighter or darker? • How can light affect how we see color? 	Class discussion to gather background information and produce interest.	Evaluate work in progress. Reflect and modify if necessary.	Project Based Learning – Assessed by Rubric Self and Peer Assessment
8.1.12A6, 8.2.12B2	Typographic design and page layout affect the outcome of various print media.	<ul style="list-style-type: none"> • How do fonts differ from one another? • What are some ways of changing the emphasis of text? • How are words and paragraphs formatted for effectiveness? 	Class discussion to gather background information and produce interest.		Project Based Learning – Assessed by Rubric Self and Peer Assessment
8.1.12A8, 8.2.12C2	Digital media files differ in their design and have their own unique advantages and disadvantages.	<ul style="list-style-type: none"> • What is the purpose of having different file types? • What are some file types that illustrations can be saved as? • What are some file types that photographs can be saved as? • What are some files types that images can be saved as? • How must you save an image in Photo Editing Software and place it in Illustration Software? • What files types are needed for use in desktop publishing (DTP) software? 	Class discussion to gather background information and produce interest.	Ongoing observations of students during assignments.	Performance Assessment Test
8.1.12A6, 8.1.12A8, 8.1.12B1, 8.1.12B3	Understanding the various tools and menus of a computer program will greatly assist the efficiency of work.	<ul style="list-style-type: none"> • How does an illustration program help you manipulate an illustration/graphic? • How does a photo editing program help you manipulate an image/photograph? • What part of the illustration program helps you create the changes? • What part of the photo editing program helps you create the changes? 	Class discussion to gather background information and produce interest.	Ongoing observations of students during assignments.	Project Based Learning – Assessed by Rubric Self and Peer Assessment Performance Assessment Test

8.1.12A8, 8.1.12B1	Innovation in digital tools and products are utilized to aid and simplify work.	<ul style="list-style-type: none"> • What is the difference between using your hand to draw an image as opposed to a computer? • What is the difference between using your hand to alter an image as opposed to altering it digitally? • What is the difference between Illustration and Photo Editing software? • Why is it important to know how to use Illustration and Photo editing Software together? • What are the key features used in DTP? • What are the various digital cameras and how do they function? • Who is known as a major contributor in digital photography? • What are the benefits of digital cameras in photography? 	Class discussion to gather background information and produce interest.	Evaluate work in progress. Reflect and modify if necessary.	Project Based Learning – Assessed by Rubric Self and Peer Assessment
8.2.12B2, 8.2.12C1-2	Environmental factors influence photographic equipment and the products produced.	<ul style="list-style-type: none"> • What types of things affect the outcome of a photograph? 	Class discussion to gather background information and produce interest.	Evaluate work in progress. Reflect and modify if necessary.	Project Based Learning – Assessed by Rubric Self and Peer Assessment
8.1.12A1&9, 8.1.12B9	Print and visual media are composed of text, graphics, and photographic images.	<ul style="list-style-type: none"> • What makes print and visual media effective? • What are the affects of well designed print media? • How are images introduced into DTP? 	Class discussion to gather background information and produce interest.	Evaluate work in progress. Reflect and modify if necessary.	Project Based Learning – Assessed by Rubric Self and Peer Assessment
1.5.12A2, 8.2.12A3	Photography captures moments of life and society.	<ul style="list-style-type: none"> • How did the development of photography impact the society? • When is it appropriate to use photography? 	Class discussion to gather background information and produce	Evaluate work in progress. Reflect and modify if necessary.	Project Based Learning – Assessed by Rubric Self and Peer

		<ul style="list-style-type: none"> • How did the technology involved in photography develop? • How did the development of digital photography impact the society? 	interest.		Assessment
1.2.12D2-3, 8.1.12B9, 8.2.12B1, 8.2.12B3	Photography requires knowledge of proper technique.	<ul style="list-style-type: none"> • What are the basic photographic terminologies for taking digital images? • What are some of the key elements that should be understood when taking photographs? • What are the systems of the digital camera? • Why is it important to know various file types and sizes and memory capabilities? 	Class discussion to gather background information and produce interest.	Evaluate work in progress. Reflect and modify if necessary.	<p>Project Based Learning – Assessed by Rubric</p> <p>Self and Peer Assessment</p>
8.1.12B2, 8.1.12A2	Use of various media and information adheres to legal and ethical laws.	<ul style="list-style-type: none"> • What are the consequences of copying and pasting other peoples work without permission? • What ethical guidelines need to be followed when producing print media? 	Class discussion to gather background information and produce interest.	Ongoing observations of students during assignments.	<p>Project Based Learning – Assessed by Rubric</p> <p>Self and Peer Assessment</p>

**Freehold Regional High School District
Course Proficiencies and Pacing**

DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I

Unit Title	Unit Understandings and Goals	Recommended Duration
Unit 1: Orientation; Class and Self Management / Health & Safety	<p>Understanding: Following safety procedures and using personal protection equipment will reduce the risk of injury. Self-management is a key to maximizing efficiency and preventing accidents. Working with other people is an important skill for life and the workplace. Knowing how to create, save, retrieve, and produce electronic work is essential in the work place.</p> <p>Goal: Students will be able to identify and implement proper safety in a work environment, including effectively working as a team. Students will also be able to demonstrate how to create, save, and retrieve a digital file on the school's network.</p>	1 week
Unit 2: Introduction to Design	<p>Understanding: The effectiveness of design, photography and artwork is influenced by the principles and elements of design. The design process is a series of steps taken in order to create a product or solve a problem. Color theory includes the physical description of individual colors as well as relationship between individual and groups of colors.</p> <p>Goal: Students will be able to identify the various steps of the design process and demonstrate that it is not a linear process. Students will be able to identify the relationships that colors have with each other and how they can be affected by qualities of tone and value. Students will be able to identify and utilizes principle of design such as balance, unity, movement, rhythm, pattern, contrast and emphasis.</p>	4 weeks
Unit 3: Introduction to Typography	<p>Typographic design and page layout affect the outcome of various print media. Print and visual media are composed of text, graphics, and photographic images.</p> <p>Goals: Students will be able to identify various font categories, styles, and families. Students will be able to identify formatting text including font size, spacing of characters. Students will be able to describe how to format word and line spacing as well as paragraph alignment. Students will be able to create, save, retrieve, and publish their own work.</p>	3 weeks
Unit 4: Introduction to Illustration Software	<p>Digital media files differ in their design and have their own unique advantages and disadvantages. Understanding the various tools and menus of a computer program will greatly assist the efficiency of work. Innovation in digital tools and products are utilized to aid and simplify work. Use of various media and information adheres to legal and ethical laws.</p> <p>Goals: Students will be label to describe difference between vector and bitmap files as well as other file types. Students will be able to describe how illustration software works. Students will be able to identify the tools and menus in illustration software and their uses. Students will be able to describe the use of layers in Illustration Software. Students will be able to describe copyright law and its application in media.</p>	5 weeks
Unit 5: Introduction to Photo Editing Software	<p>Digital media files differ in their design and have their own unique advantages and disadvantages. Understanding the various tools and menus of a computer program will greatly assist the efficiency of work. Innovation in digital tools and products are utilized to aid and simplify work.</p> <p>Goal: Students will be label to describe difference between various photographic file types. Students will be able to describe how photo editing software works. Students will be able to identify the tools and menus in photo editing software and their uses. Students will be able to describe the use of layers in photo editing software. Students will be able to describe how to place</p>	4 weeks

	images in alternate programs.	
Unit 6: Portfolio Designs Using Illustrations and Photo Editing	<p>Digital media files differ in their design and have their own unique advantages and disadvantages. Understanding the various tools and menus of a computer program will greatly assist the efficiency of work. Innovation in digital tools and products are utilized to aid and simplify work. Print and visual media are composed of text, graphics, and photographic images.</p> <p>Goal: Students will be able to differentiate between Illustration and Photo Editing Software. Students will be able to create projects utilizing both software packages. Students will be able to create custom work utilizing text, graphics, and photography.</p>	5 weeks
Unit 7: Desktop Publishing	<p>Typographic design and page layout affect the outcome of various print media. Digital media files differ in their design and have their own unique advantages and disadvantages. Print and visual media are composed of text, graphics, and photographic images. Use various media and information adhere to legal and ethical laws.</p> <p>Goal: Students will be able identify the appropriate use of Desktop Publishing Software. Students will be able to identify and demonstrate use of DTP menus and tools. Students will be able to demonstrate various formatting techniques such as resizing images and text. Students will be able to identify and describe major contributors to desktop publishing.</p>	5 weeks
Unit 8: History of Photography	<p>Photography captures moments of life and society.</p> <p>Goal: Students will be able to describe how photography impacted society. Students will be able to identify how early technology works. Students will be able to identify persons that impacted the development of photography. Students will be able to identify various styles of photography.</p>	1 week
Unit 9: Introduction to Digital Photography	<p>Innovation in digital tools and products are utilized to aid and simplify work. Photography captures moments of life and society. Photography requires knowledge of proper technique.</p> <p>Goal: Students will be able to describe the history of digital photography including the major contributor, where it was used, and how it affected society. Students will be able to identify the various types of digital cameras and their uses. Students will be able to identify and use various terms of digital photography.</p>	1 week
Unit 10: Digital Photography: The Camera & The Basics	<p>Innovation in digital tools and products are utilized to aid and simplify work. Environmental factors influence photographic equipment and the products produced. Photography requires knowledge of proper technique.</p> <p>Goal: Students will be able to describe the benefits and features of a digital camera, including how pictures are stored. Students will be able to describe how a camera operates including the various systems such as viewing/focusing, lighting, and image storing. Students will be able to describe and reproduce the techniques used for various photographs such as action, and close-up.</p>	5 weeks

Freehold Regional High School District
DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I
 Unit 1: Orientation; Class and Self Management / Health & Safety

Enduring Understandings: Following safety procedures and using personal protection equipment will reduce the risk of injury. Self-management is a key to maximizing efficiency and preventing accidents. Working with other people is an important skill for life and the workplace. Knowing how to create, save, retrieve, and produce electronic work is essential in the work place.

Essential Questions: What are the safety concerns to be considered when working in a lab setting in school or on the job? What protection can be used in a laboratory environment? What should be part of an effective safety program? What characteristics are essential to a functional team? What are the benefits of working in a team environment as opposed to individually? How is work done on a computer created and stored? What is the benefit of a computer network?

Unit Goal: Students will be able to identify and implement proper safety in a work environment, including effectively working as a team. Students will also be able to demonstrate how to create, save, and retrieve a digital file on the school's network.

Duration of Unit: 1 weeks

NJCCCS: 9.2.12F1-5, 9.2.12B2-3, 9.2.12D3-5, 9.1.12A2-3, 9.1.12B4-5, 8.1.12A8

Guiding / Topical Questions	Content and Skills	Instructional Resources and Materials	Teaching Strategies	Assessment Strategies
<ul style="list-style-type: none"> What are the governing bodies that set safety laws? What is Personal Protective Equipment? 	<ul style="list-style-type: none"> Practice the safe use of tools and equipment. Implement safety procedures in the classroom. Identify safety signage and the hazard the symbol is warning against. Model methods for maximizing personal productivity in a safe environment. 	<ul style="list-style-type: none"> Lecture PowerPoint presentation on classroom and occupational safety procedures, PPE and hazardous signage. Research 	<ul style="list-style-type: none"> PowerPoint presentation on classroom and occupational safety procedures, PPE and hazardous signage. 	<ul style="list-style-type: none"> Quiz on safety signage Signed safety contracts Student self-assessment of safety procedures Performance test to include safety scenarios and emergency situations. Create a poster to the theme "Safety Matters".
<ul style="list-style-type: none"> What are some key characteristics of team work? What are the advantages of working in groups? 	<ul style="list-style-type: none"> Model methods for maximizing personal productivity in a safe environment. 	<ul style="list-style-type: none"> Notes from previous lesson. Bell, whistle, some kind of noise making device. 	<ul style="list-style-type: none"> Divide class into 3 or 4 teams. Students will compete in a quiz bowl testing their safety sign/symbol knowledge. Use whatever is available to ring in (call bell, whistle etc.) Winning team receives extra credit. 	<ul style="list-style-type: none"> Informal, ongoing observations of students following safety procedures.
<ul style="list-style-type: none"> Where are files stored on the network? How do you retrieve files from the network? How do you print documents? 	<ul style="list-style-type: none"> Save and retrieve documents. Print documents on specific output devices. 	<ul style="list-style-type: none"> Computer with network connection. Demonstration of creating, saving, and retrieving file. 	<ul style="list-style-type: none"> Begin a paper or electronic portfolio to follow yearly progress. Students will type in word rules discussed in class, save and print their document to be kept in their portfolios. 	<ul style="list-style-type: none"> Check student work to see if complete. Shows understanding of how to create, save, and retrieve files from network.

Suggestions on how to differentiate in this unit:

A hands-on approach to assignments and projects is recommended as the most effective method of learning. Students that fall behind may be teamed up with students whom excel in particular topics. Teacher should always adjust learning environment based on reluctant learners or special education needs.

Freehold Regional High School District
DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I

Unit 2: Introduction to Design

Enduring Understandings: The effectiveness of design, photography and artwork is influenced by the principles and elements of design. The design process is a series of steps taken in order to create a product or solve a problem. Color theory includes the physical description of individual colors as well as relationship between individual and groups of colors.

Essential Questions: Why is it important to incorporate the design principles in all artwork and designs? How is the design process carried out and what are the steps? How are colors grouped and related? How can colors be made lighter or darker? How can light affect how we see color?

Unit Goal: Students will be able to identify the various steps of the design process and demonstrate that it is not a linear process. Students will be able to identify the relationships that colors have with each other and how they can be affected by qualities of tone and value. Students will be able to identify and utilizes principle of design such as balance, unity, movement, rhythm, pattern, contrast and emphasis.

Duration of Unit: 4 weeks

NJCCCS: 1.3.12D.1, 1.4.12A.2, 8.1.12B9, 8.1.12B11, 8.2..12B1, 1.1.12A1, 1.2.12D3

Guiding / Topical Questions	Content and Skills	Instructional Resources and Materials	Teaching Strategies	Assessment Strategies
<ul style="list-style-type: none"> • What are the principles of design? • How do proportion and enlarging relate to the principles? 	<ul style="list-style-type: none"> • Students will understand the basic Principles of Design (balance, unity, movement, rhythm, pattern, contrast and emphasis). • Students will identify and differentiate between the principles of design. • Students will be able to enhance their drawing and imagination by enhancing their right-hemisphere function. • positive and negative space and negative space reversal. 	<ul style="list-style-type: none"> • Lecture • PowerPoint presentation on civilization design principles • http://www.technologystudent.com/designpro/drawdex.htm 	<ul style="list-style-type: none"> • Right Hemisphere activity – Upside down man drawing • Shading activities – shadows, textures, gray scale • Design principles artistic word expression designs • Identify design principles using magazine advertisements • Contrast assignment to cut and paste examples from magazines, newspapers etc. • Portfolio • Laboratory work 	<ul style="list-style-type: none"> • Visual products • Rubrics • Self and peer evaluation • Quizzes • Oral presentation <p>Sample Rubric (http://rubistar.4teachers.org/index.php?screen=ShowRubric&module=Rubistar&rubric_id=1417749&)</p> <ul style="list-style-type: none"> • Informal, ongoing observations of students following safety procedures.
<ul style="list-style-type: none"> • What is the relationship between primary, secondary, and complimentary colors? • What is the black and white value scale? • How can tints affect the outcome of a color? • What are the various shading techniques used to show lighting? 	<ul style="list-style-type: none"> • Students will understand the relationships between primary, secondary and complimentary colors. • Students will be able to identify the interaction of primaries and simultaneous contrast. • Students will be able to identify various shading techniques. • Students will understand shading and value. 	<ul style="list-style-type: none"> • PowerPoint Presentation • Paper • Drawing Tools • http://www.technologystudent.com/designpro/drawdex.htm 	<ul style="list-style-type: none"> • Students will develop a black and white value scale. • Students will develop a 5-step scale to achieve multiple tints of a primary or secondary color. 	

<ul style="list-style-type: none"> • What is the difference between the various shading terms? 	<ul style="list-style-type: none"> • Students will understand 			
<ul style="list-style-type: none"> • Describe the steps of the design process? • What types of drawings/ 	<ul style="list-style-type: none"> • Students will become familiar and apply the principles of design to their own work. • Complete the design processes or design loop from start to finish. 	<ul style="list-style-type: none"> • Design Brief and Project Specifications • Paper • Drawing Tools 	<ul style="list-style-type: none"> • Design process activities – redesign of state quarter, license plate using thumbnails, rough and comprehensive sketching. 	

Suggestions on how to differentiate in this unit: A hands-on approach to assignments and projects is recommended as the most effective method of learning. Students that fall behind may be teamed up with students whom excel in particular topics. Teacher should always adjust learning environment based on reluctant learners or special education needs.

Freehold Regional High School District
DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I

Unit 3: Introduction to Typography

Enduring Understandings: Typographic design and page layout affect the outcome of various print media.

Essential Questions: How do fonts differ from one another? What are some ways of changing the emphasis of text? How are words and paragraphs formatted for effectiveness?

Unit Goal: Students will be able to identify various font categories, styles, and families. Students will be able to identify formatting text including font size, spacing of characters. Students will be able to describe how to format word and line spacing as well as paragraph alignment. Students will be able to create, save, retrieve, and publish their own work.

Duration of Unit: 3 weeks

NJCCCS: 8.1.12A6, 8.2.12B2

Guiding / Topical Questions	Content and Skills	Instructional Resources and Materials	Teaching Strategies	Assessment Strategies
<ul style="list-style-type: none"> How are fonts classified? 	<ul style="list-style-type: none"> Distinguish between the various styles of type. Identify various families of type. Understand font categories. Become familiar with various type styles and uses for the styles. 	<ul style="list-style-type: none"> Lecture PowerPoint presentation on typography basics Computer with network connection. 	<ul style="list-style-type: none"> PowerPoint presentation on typography style with information on origin and development. 	<ul style="list-style-type: none"> Visual products Rubrics Sample Rubric History of Photographers
<ul style="list-style-type: none"> What are the individual components of type? 	<ul style="list-style-type: none"> Identify and label various parts of type. 	<ul style="list-style-type: none"> Hands on activities to identify styles and families of type 	<ul style="list-style-type: none"> Identify and label a diagram of the parts of type. 	<ul style="list-style-type: none"> Self and peer evaluation Quizzes Oral presentation Sample Rubric
<ul style="list-style-type: none"> How can the physical appearance of a font be changed? 	<ul style="list-style-type: none"> Define and understand various typography terms. Differentiate between kerning, tracking and leading with type. 	<ul style="list-style-type: none"> Lecture Interactive presentation to visually show the differences between tracking, kerning and leading. 	<ul style="list-style-type: none"> Identify and label a diagram of formatting type. 	<p>Informal, ongoing observations of students following safety procedures.</p>
<ul style="list-style-type: none"> What are the units of measurement for fonts? 	<ul style="list-style-type: none"> Describe the difference between picas and points. 	<ul style="list-style-type: none"> Hands on activities to identify use of typographic measurement such as picas and points. 	<ul style="list-style-type: none"> Create chart comparing the effects of various adjustment of pica and point values for text. 	

<ul style="list-style-type: none"> • How are paragraphs formatted? 	<ul style="list-style-type: none"> • Apply and differentiate between various paragraph alignments. 	<ul style="list-style-type: none"> • Lecture • PowerPoint presentation on paragraph formatting. • Computer with network connection and MS Word 	<ul style="list-style-type: none"> • Format text into legible paragraphs using word processing program. 	
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Suggestions on how to differentiate in this unit: A hands-on approach to assignments and projects is recommended as the most effective method of learning. Students that fall behind may be teamed up with students whom excel in particular topics. Teacher should always adjust learning environment based on reluctant learners or special education needs.

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DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I

Unit 4: Introduction to Illustration Software

Enduring Understandings: Digital media files differ in their design and have their own unique advantages and disadvantages. Understanding the various tools and menus of a computer program will greatly assist the efficiency of work. Innovation in digital tools and products are utilized to aid and simplify work. Use of various media and information adheres to legal and ethical laws.

Essential Questions: What is the purpose of having different file types? What are some file types that illustrations can be saved as? How does an illustration program help you manipulate an illustration/graphic? What part of the illustration program helps you create the changes? What is the difference between using your hand to draw an image as opposed to a computer? What are the consequences of copying and pasting other peoples work without permission?

Unit Goal: Students will be label to describe difference between vector and bitmap files as well as other file types. Students will be able to describe how illustration software works. Students will be able to identify the tools and menus in illustration software and their uses. Students will be able to describe the use of layers in Illustration Software. Students will be able to describe copyright law and its application in media.

Duration of Unit: 5 weeks

NJCCCS: 8.1.12A6, 8.2.12B2

Guiding / Topical Questions	Content and Skills	Instructional Resources and Materials	Teaching Strategies	Assessment Strategies
<ul style="list-style-type: none"> • What is the difference between vector and bitmap based graphics? • What are the various file types that work can be saved as? • What are the benefits of saving files in various formats? 	<ul style="list-style-type: none"> • Difference between vector vs. bitmap. • Saving formats available in Illustration Software. 	<ul style="list-style-type: none"> • Lecture • PowerPoint presentation • Computer with network connection with Illustration Software. 	<ul style="list-style-type: none"> • Laboratory work 	<ul style="list-style-type: none"> • Visual products • Rubrics • Sample Rubric Poster
<ul style="list-style-type: none"> • What are the basic tools and menus within an illustration program? • What are the functions of the various tools and menus? • What are quick keys and how they can benefit your work? 	<ul style="list-style-type: none"> • Demonstrate and understand Illustration Software. • Become familiar with and know the tools and menus in Illustration Software. • Become familiar with quick keys in Illustration Software. • Use fills, strokes, gradients, colors and patterns within a design. • Create, select, modify, and arrange objects. 	<ul style="list-style-type: none"> • Worksheets • PowerPoint presentation • Interactive presentation of tools for students to follow along with • Tutorials • Computer with network connection with Illustration Software. • <i>Adobe Illustrator CS2 Classroom in a Book</i>, Adobe Creative Team, published by PeachPit Press 2005;ISBN-10: 0-321-32183-9 	<ul style="list-style-type: none"> • Complete a series of tutorials to gain knowledge in Illustration Software. • Do now activities using a different tool that they will use for that class period. • Tools identification worksheet • Quick keys identification worksheet • Various tutorials applying each tool and the combination of tools 	<ul style="list-style-type: none"> • Self and peer evaluation • Quizzes • Oral presentation • Sample Rubric • Informal, ongoing observations of students following safety procedures.

<ul style="list-style-type: none"> • What are layers and how are they used? • How can layers be used to “build” an illustration / graphic? 	<ul style="list-style-type: none"> • Demonstrate and understand the use of layers. 	<ul style="list-style-type: none"> • Tutorials • Computer with network connection with Illustration Software. • <i>Adobe Illustrator CS2 Classroom in a Book</i>, Adobe Creative Team, published by PeachPit Press 2005;ISBN-10: 0-321-32183-9 	<ul style="list-style-type: none"> • Design and create quality products using the design process • Recreate a cartoon character of their choice using layers, and tools learned in Illustration Software. 	
<ul style="list-style-type: none"> • Why should design work be finished before creating work on the illustration program? • How can the elements of design affect the outcome of the final product? 	<ul style="list-style-type: none"> • Combine the design process and develop final products in Illustration Software. • Understand the difference between good and bad design. • Display basic Principles of Design (balance, unity, movement, rhythm, pattern, contrast and emphasis) in all of their work. 	<ul style="list-style-type: none"> • Design Brief • Specifications for Project 	<ul style="list-style-type: none"> • Design and create competitive quality projects eligible for entry into projects to compete in local, regional, state and national competitions. • Design process assignment of the NJ – TSA pin design from sketching to final products. • Portfolio Work 	
<ul style="list-style-type: none"> • What is copyright laws? 	<ul style="list-style-type: none"> • What does it mean to have a copyright? 	<ul style="list-style-type: none"> • Computer with network connection. 	<ul style="list-style-type: none"> • Assign groups of students to research copyright and make an attractive PowerPoint presentation with the information they gathered. 	
<p>Suggestions on how to differentiate in this unit: A hands-on approach to assignments and projects is recommended as the most effective method of learning. Students that fall behind may be teamed up with students whom excel in particular topics. Teacher should always adjust learning environment based on reluctant learners or special education needs.</p>				

Freehold Regional High School District
DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I

Unit 5: Introduction to Photo Editing Software

Enduring Understandings: Digital media files differ in their design and have their own unique advantages and disadvantages. Understanding the various tools and menus of a computer program will greatly assist the efficiency of work. Innovation in digital tools and products are utilized to aid and simplify work.

Essential Questions: What are some file types that photographs can be saved as? How does an photo editing program help you manipulate an image/photograph? What part of the photo editing program helps you create the changes? What is the difference between using your hand to alter an image as opposed to altering it digitally?

Unit Goal: Students will be label to describe difference between various photographic file types. Students will be able to describe how photo editing software works. Students will be able to identify the tools and menus in photo editing software and their uses. Students will be able to describe the use of layers in photo editing software. Students will be able to describe how to place images in alternate programs.

Duration of Unit: 4 weeks

NJCCCS: 8.1.12A6, 8.2.12B2

Guiding / Topical Questions	Content and Skills	Instructional Resources and Materials	Teaching Strategies	Assessment Strategies
<ul style="list-style-type: none"> • What is the various files types available in the photo editing software? • What are the various file types that work can be saved as? • What are the benefits of saving files in various formats? 	<ul style="list-style-type: none"> • Differentiate between various formats and file extensions offered in Photo editing Software. 	<ul style="list-style-type: none"> • Lecture • PowerPoint presentation 	<ul style="list-style-type: none"> • Guided notes 	<ul style="list-style-type: none"> • Quizzes
<ul style="list-style-type: none"> • What are the basic tools and menus within an photo editing program? • What are the functions of the various tools and menus? • What are quick keys and how they can benefit your work? 	<ul style="list-style-type: none"> • Demonstrate and understanding of Photo editing Software. • Become familiar with and know the tools and menus in Photo editing Software • Create, select, modify, and arrange objects. • Use fills strokes, gradients, colors and patterns within a design. 	<ul style="list-style-type: none"> • Worksheets • PowerPoint presentation • Interactive presentation of tools for students to follow along with • Tutorials • Computer with network connection with Photo Editing Software. • <i>Adobe Photoshop CS2 Classroom in a Book</i>, Adobe Creative Team, published by PeachPit Press 2005; ISBN-10: 0-321-32184-7 http://www.adobe.com/ • http://www.bluesfear.com/ 	<ul style="list-style-type: none"> • Tools identification worksheet • Quick keys identification worksheet • Complete a series of tutorials to gain knowledge in Photo editing Software. • Do now activities using a different tool that they will use for that class period. 	<ul style="list-style-type: none"> • Visual products • Rubrics Sample Rubric Tutorials (http://rubistar.4teachers.org/index.php?screen=ShowRubric&module=Rubistar&rubric_id=1417757&) • Self and peer evaluation • Quizzes • Oral presentation • Informal, ongoing observations of students following safety procedures.

<ul style="list-style-type: none"> • What are layers and how are they used? • How can layers be used to as masks? 	<ul style="list-style-type: none"> • Demonstrate and understand the use of layers. 	<ul style="list-style-type: none"> • Tutorials • Computer with network connection with Photo Editing Software. • <i>Adobe Photoshop CS2 Classroom in a Book</i>, Adobe Creative Team, published by PeachPit Press 2005; ISBN-10: 0-321-32184-7 http://www.adobe.com/ • http://www.bluesfear.com/ 	<ul style="list-style-type: none"> • Show film clips from various pixar or animated movies to show lighting, shadowing and 3D dimension. 	
<ul style="list-style-type: none"> • Why should design work be finished before creating work on the photo editing program? • How can the elements of design affect the outcome of the final product? 	<ul style="list-style-type: none"> • Understand the difference between good and bad design. • Display basic Principles of Design (balance, unity, movement, rhythm, pattern, contrast and emphasis) in all of their work. 	<ul style="list-style-type: none"> • Specifications for Project • Computer with network connection with Photo Editing Software. 	<ul style="list-style-type: none"> • Produce professional quality printed publications. • Painting in Photo editing Software tutorials • Portfolio 	
<ul style="list-style-type: none"> • How can you export files for use in alternate programs? • How do you import image files in alternate programs? 	<ul style="list-style-type: none"> • Place Photo editing Software images in alternate programs. • Become familiar with quick keys in Photo editing Software. 	<ul style="list-style-type: none"> • Computer with network connection with Photo Editing Software, and Alternate Program, such as MSWord. 	<ul style="list-style-type: none"> • Portfolio • Laboratory work 	

Suggestions on how to differentiate in this unit: A hands-on approach to assignments and projects is recommended as the most effective method of learning. Students that fall behind may be teamed up with students whom excel in particular topics. Teacher should always adjust learning environment based on reluctant learners or special education needs.

Freehold Regional High School District
DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I
 Unit 6: Portfolio Design Using Illustration and Photo Editing

Enduring Understandings: Digital media files differ in their design and have their own unique advantages and disadvantages. Understanding the various tools and menus of a computer program will greatly assist the efficiency of work. Innovation in digital tools and products are utilized to aid and simplify work. Print and visual media are composed of text, graphics, and photographic images.

Essential Questions: How must you save an image in Photo Editing Software and place it in Illustration Software? What is the difference between Illustration and Photo Editing software? Why is it important to know how to use Illustration and Photo editing Software together? What makes print and visual media effective?

Unit Goal: Students will be able to differentiate between Illustration and Photo Editing Software. Students will be able to create projects utilizing both software packages. Students will be able to create custom work utilizing text, graphics, and photography.

Duration of Unit: 5 weeks

NJCCCS: 8.1.12A8, 8.2.12C2, 8.1.12A6, 8.1.12A8, 8.1.12B1, 8.1.12B3, 8.1.12A5, 8.1.12B2, 8.1.12A2

Guiding / Topical Questions	Content and Skills	Instructional Resources and Materials	Teaching Strategies	Assessment Strategies
<ul style="list-style-type: none"> What is the difference between Illustration and Photo Editing? 	<ul style="list-style-type: none"> Describe proper applications of Illustration and Photo editing Software 	<ul style="list-style-type: none"> Computer with network connection and DTP software Printer 	<ul style="list-style-type: none"> Compare illustration and photo editing software and complete a comparison chart between each. Be sure to list the advantages and disadvantages of each. 	<ul style="list-style-type: none"> Visual products Rubrics Poster Sample Rubric http://rubistar.4teachers.org/index.php?screen=PrintRubric&rubric_id=1357669&no_return=1& Multimedia Sample Rubric ShowRubric&module=Rubistar&rubric_id=1417738&">http://rubistar.4teachers.org/index.php?screen>ShowRubric&module=Rubistar&rubric_id=1417738& Self and peer evaluation Quizzes Oral presentation ShowRubric&module=Rubistar&rubric_id=1417749&">http://rubistar.4teachers.org/index.php?screen>ShowRubric&module=Rubistar&rubric_id=1417749& Informal, ongoing observations of students following safety procedures.
<ul style="list-style-type: none"> How must you save an image in Photo Editing Software and place it in Illustration Software? 	<ul style="list-style-type: none"> Differences between various extension files to be used within each platform. 	<ul style="list-style-type: none"> Computer with network connection and DTP software Printer PowerPoint Presentation 	<ul style="list-style-type: none"> Laboratory work 	
<ul style="list-style-type: none"> Why is it important to know how to use Illustration and Photo editing Software together? 	<ul style="list-style-type: none"> Simultaneously use Illustration and Photo editing Software. Become more familiar with quick keys in various platforms. How to move freely between Photo editing and Illustration platforms. Students will become familiar with animation using various platforms. Use of layers in programs to produce desired effects. 	<ul style="list-style-type: none"> Computer with network connection and Illustration and Photo Editing Software. Printer <i>Adobe Illustrator CS2 Classroom in a Book</i>, Adobe Creative Team, published by PeachPit Press 2005; ISBN-10: 0-321-32183-9 <i>Adobe Photoshop CS2 Classroom in a Book</i>, Adobe Creative Team, published by PeachPit Press 2005; ISBN-10: 0-321-32184-7 http://www.adobe.com/ http://www.bluesfear.com/ 	<ul style="list-style-type: none"> Artistic expression with words using Illustration Software Recreations and redesigns of Logos Research an illustration in a magazine, journal, Cd, Internet, artwork, books etc. Cut them out to scan the images as a basis of a design, alter the image in anyway they wish; changing color, shape, size etc. Develop a poster which unifies an illustration and/or photograph with type. 	

		<ul style="list-style-type: none"> • http://www.tutorialized.com/ • http://graphicdesign.about.com/ • http://mediadesigner.digitalmediadirect.com/ • Specifications for Project 		
<ul style="list-style-type: none"> • What is the importance of completing the design process prior to working on the computer? • Why is it important to complete the whole design process? 	<ul style="list-style-type: none"> • Display basic Principles of Design (balance, unity, movement, rhythm, pattern, contrast and emphasis) in all of their work. • Software. • Understand the difference between good and bad design. • Produce professional quality printed publications. • Utilize the design process. 	<ul style="list-style-type: none"> • Computer with network connection and Illustration and Photo Editing Software. • Printer • Specifications for TSA Project 	<ul style="list-style-type: none"> • Technology Student Association (TSA) State competition to develop a NJ Pin design to be represented at the national conferences; thumbnail, rough, comprehensive sketches as well as a final product generated on the computer. • Technology Student Association (TSA) State competition for a T-shirt Design for use at the national conference. • Technology Student Association (TSA) State competition for Promotional Graphics (Poster Design) for use at the national conference. • Portfolio 	
<p>Suggestions on how to differentiate in this unit: A hands-on approach to assignments and projects is recommended as the most effective method of learning. Students that fall behind may be teamed up with students whom excel in particular topics. Teacher should always adjust learning environment based on reluctant learners or special education needs.</p>				

Freehold Regional High School District
DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I

Unit 7: Desktop Publishing

Enduring Understandings: Typographic design and page layout affect the outcome of various print media. Digital media files differ in their design and have their own unique advantages and disadvantages. Print and visual media are composed of text, graphics, and photographic images. Use various media and information adhere to legal and ethical laws.

Essential Questions: What are the affects of well designed print media? What files types are needed for use in desktop publishing (DTP) software? How are images introduced into DTP? What are the key features used in DTP? What ethical guidelines need to be followed when producing print media?

Unit Goal: Students will be able identify the appropriate use of Desktop Publishing Software. Students will be able to identify and demonstrate use of DTP menus and tools. Students will be able to demonstrate various formatting techniques such as resizing images and text. Students will be able to identify and describe major contributors to desktop publishing.

Duration of Unit: 5 weeks.

NJCCCS: 8.1.12A6, 8.2.12B2, 8.1.12A8, 8.2.12C2, 8.1.12B1, 8.1.12B3, 8.1.12B2, 8.1.12A2

Guiding / Topical Questions	Content and Skills	Instructional Resources and Materials	Teaching Strategies	Assessment Strategies
<ul style="list-style-type: none"> How do you choose the appropriate software application to complete a desktop publishing project? 	<ul style="list-style-type: none"> Demonstrate an understanding of the correct desktop publishing platform. Identify and understand various aspects of the platform. 	<ul style="list-style-type: none"> Supplementary texts: <i>Introduction to Desktop Publishing with Digital Graphics</i>, published by Gelcoe/McGrawHill, 2008; ISBN 9780078729133 	<ul style="list-style-type: none"> Students will identify the areas in which DTP is utilized. 	<ul style="list-style-type: none"> Visual products Rubrics Poster Sample Rubric (http://rubistar.4teachers.org/index.php?screen=PrintRubric&rubric_id=1357669&no_return=1&)
<ul style="list-style-type: none"> What are the functions of the various menus and tool bars.? Why is it important to know how to import, resize and edit postscript artwork? What are various scanning and importing methods? 	<ul style="list-style-type: none"> Demonstrate an understanding of the menus bar and its options. Import and resize postscript art work. Import text from a word processing file. Import a scanned image. Demonstrate an understanding of bit-mapped images and graphics. Importance of importing, resizing and editing postscript art work. . 	<ul style="list-style-type: none"> Tutorials Computer with network connection and DTP software Printer 	<ul style="list-style-type: none"> Design and produce a business card using the template and step and repeat options. Create a three panel <i>flyer for a club or social event</i> within the school which has 3 - 5 Photo editing Software images taken with a digital or still video camera. Design an advertisement for this course to be placed in the school, which incorporates as many of the skills learned in this unit as possible. Utilizing the problem-solving model, develop the best solutions to a teacher-assigned scenario using bit-mapped imaging tools. Modify an existing file to teacher-assigned specifications. Using specific guidelines design and create stationery on the computer, 	<ul style="list-style-type: none"> Brochure Sample Rubric (http://rubistar.4teachers.org/index.php?screen=ShowRubric&module=Rubistar&rubric_id=1417742&) Newspaper or Newsletter Sample Rubric (http://rubistar.4teachers.org/index.php?screen=ShowRubric&module=Rubistar&rubric_id=1417744&) Self and peer evaluation Quizzes Oral presentation Sample Rubric (http://rubistar.4teachers.org/index.php?screen=ShowRubric&module=Rubistar&rubric_id=1417749&) Informal, ongoing observations of students following safety procedures.

			<p>which has a scanned, or imported image tinted.</p> <ul style="list-style-type: none"> • Create a magazine spread, which has text and imagery utilizing the runaround option.
<ul style="list-style-type: none"> • Why do we use points and picas as the measuring system? 	<ul style="list-style-type: none"> • Measure in points and picas. • Convert decimals and fractions to points and picas. 	<ul style="list-style-type: none"> • Typographic ruler • Worksheet • Calculator 	<ul style="list-style-type: none"> • Measure the images on a prepared teacher handout in points and picas. • On a practice handout, convert given measurements indicated in decimals and fractions into points and picas. • Given several examples of various type sizes and rules, measure them in points using a type gauge.
<ul style="list-style-type: none"> • Who are major contributors to graphic design and what was the impact in society? 	<ul style="list-style-type: none"> • Identify graphic designers. • Identify importance of graphic designers and their social impact on the community. 	<ul style="list-style-type: none"> • Computer with network connection • Printer 	<ul style="list-style-type: none"> • Research a graphic designer of your choice and create a brochure and a promotional advertisement.

Suggestions on how to differentiate in this unit: A hands-on approach to assignments and projects is recommended as the most effective method of learning. Students that fall behind may be teamed up with students whom excel in particular topics. Teacher should always adjust learning environment based on reluctant learners or special education needs.

Freehold Regional High School District
DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I

Unit 8: History of Photography

Enduring Understandings: Photography captures moments of life and society.

Essential Questions: How did the development of photography impact the society? When is it appropriate to use photography? How did the technology involved in photography develop?

Unit Goal: Students will be able to describe how photography impacted society. Students will be able to identify how early technology works. Students will be able to identify persons that impacted the development of photography. Students will be able to identify various styles of photography.

Duration of Unit: 1 week

NJCCCS: 1.5.12A2, 8.2.12A3

Guiding / Topical Questions	Content and Skills	Instructional Resources and Materials	Teaching Strategies	Assessment Strategies
<ul style="list-style-type: none"> How did the development of photography impact the society? 	<ul style="list-style-type: none"> Identify the impacts of photography on the community. Identify the technological impacts in photography. Describe early attempts to produce photography images. 	<ul style="list-style-type: none"> Computer with network connection Assorted photographs LCD projector 	<ul style="list-style-type: none"> View and discuss old photographic prints. Compare the original photographs with photography of today. 	<ul style="list-style-type: none"> Visual products Rubrics Sample Rubric History of Photographers (http://rubistar.4teachers.org/index.php?screen=ShowRubric&module=Rubistar&rubric_id=1417754&) Self and peer evaluation Quizzes Oral presentation Sample Rubric (http://rubistar.4teachers.org/index.php?screen=ShowRubric&module=Rubistar&rubric_id=1417749&) Informal, ongoing observations of students following safety procedures.
<ul style="list-style-type: none"> What are the various types and styles of photography? 	<ul style="list-style-type: none"> Research and understand various types and styles of photography. 	<ul style="list-style-type: none"> Computer with network connection LCD projector 	<ul style="list-style-type: none"> Assign groups of students to research areas of photography types and styles and make an attractive PowerPoint presentation with general knowledge and examples of photography. 	
<ul style="list-style-type: none"> What and who contributed to the inventions leading to present day photography? 	<ul style="list-style-type: none"> Name inventors and inventions which led to present day photography Describe the operation of a 35 mm camera. 	<ul style="list-style-type: none"> Computer with network connection Printer 	<ul style="list-style-type: none"> Research a SLR 35mm or film format camera and labels its components. 	

Suggestions on how to differentiate in this unit: A hands-on approach to assignments and projects is recommended as the most effective method of learning. Teacher should always adjust learning environment based on reluctant learners or special education needs.

Freehold Regional High School District
DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I

Unit 9: Introduction to Digital Photography

Enduring Understandings: Innovation in digital tools and products are utilized to aid and simplify work. Photography captures moments of life and society. Photography requires knowledge of proper technique.

Essential Questions: What are the various digital cameras and how do they function? How did the development of digital photography impact the society? Who is known as a major contributor in digital photography? What are the basic photographic terminologies for taking digital images? What types of things affect the outcome of a photograph?

Unit Goal: Students will be able to describe the history of digital photography including the major contributor, where it was used, and how it affected society. Students will be able to identify the various types of digital cameras and their uses. Students will be able to identify and use various terms of digital photography.

Duration of Unit: 1 week

NJCCCS: 8.1.12A8, 8.1.12B1, 1.5.12A2, 8.2.12A3, 1.2.12D2-3, 8.1.12B9, 8.2.12B1, 8.2.12B3

Guiding / Topical Questions	Content and Skills	Instructional Resources and Materials	Teaching Strategies	Assessment Strategies
<ul style="list-style-type: none"> When did digital photography begin to impact society? 	<ul style="list-style-type: none"> Identify and describe the impacts of digital cameras on photography Research and understand the history of digital photography 	<ul style="list-style-type: none"> http://photography.about.com/ Magazines: Armature Photographer Professional Photographer Zoom 	<ul style="list-style-type: none"> Research and identify various national magazines to first use digital images. 	<ul style="list-style-type: none"> Visual products Rubrics Self and peer evaluation Quizzes Oral presentation Sample Rubric (http://rubistar.4teachers.org/index.php?screen=ShowRubric&module=Rubistar&rubric_id=1417749&) Informal, ongoing observations of students following safety procedures.
<ul style="list-style-type: none"> How does a digital camera work? 	<ul style="list-style-type: none"> Identify terms and basic concepts used with digital capture Identify and label parts of the digital camera 	<ul style="list-style-type: none"> Lecture Note PowerPoint Notes Digital Camera Worksheet Vocabulary Worksheet 	<ul style="list-style-type: none"> Label a digital camera and its various components. Research and identify basic concepts and terms related to digital photography 	
<ul style="list-style-type: none"> What are the various types of digital cameras available? 	<ul style="list-style-type: none"> Research and understand various types and styles of digital cameras 	<ul style="list-style-type: none"> Computer with network connection. http://photography.about.com/ 	<ul style="list-style-type: none"> Compare digital cameras and complete a comparison chart between each. 	

Suggestions on how to differentiate in this unit: A hands-on approach to assignments and projects is recommended as the most effective method of learning. Students that fall behind may be teamed up with students whom excel in particular topics. Teacher should always adjust learning environment based on reluctant learners or special education needs.

Freehold Regional High School District
DIGITAL MEDIA AND PHOTOGRAPHIC DESIGN I

Unit 10: Digital Photography: The Camera & The Basics

Enduring Understandings: Innovation in digital tools and products are utilized to aid and simplify work. Environmental factors influence photographic equipment and the products produced. Photography requires knowledge of proper technique.. Digital media files differ in their design and have their own unique advantages and disadvantages.

Essential Questions: What are the benefits of digital cameras in photography? What are some of the key elements that should be understood when taking photographs? What are the systems of the digital camera? Why is it important to know various file types and sizes and memory capabilities? What are some files types that images can be saved as?

Unit Goal: Students will be able to describe the benefits and features of a digital camera, including how pictures are stored. Students will be able to describe how a camera operates including the various systems such as viewing/focusing, lighting, and image storing. Students will be able to describe and reproduce the techniques used for various photographs such as action, and close-up.

Duration of Unit: 5 weeks

NJCCCS: 8.1.12A8, 8.2.12C2, 8.1.12B1, 8.2.12B2, 8.212C1-2, 1.2.12D2-3, 8.1.12B9, 8.2.12B1, 8.2.12B3

Guiding / Topical Questions	Content and Skills	Instructional Resources and Materials	Teaching Strategies	Assessment Strategies
<ul style="list-style-type: none"> What advantages does digital photography over traditional photography? 	<ul style="list-style-type: none"> Identify advantages and disadvantages of digital photography. Identify ways in which digital photographs differ from traditional photographs. Describe and define when to use digital photography. 	<ul style="list-style-type: none"> Computer with network connection. Assortment of photographs taken using traditional methods and with digital equipment. 	<ul style="list-style-type: none"> Create a comparison table between the two types of photography. Showcase a variety of photographs, students identify differences and similarity. 	<ul style="list-style-type: none"> Visual products Rubrics Quizzes Self and peer evaluation Oral presentation Sample Rubric (http://rubistar.4teachers.org/index.php?screen=ShowRubric&module=Rubistar&rubric_id=1417749&) Informal, ongoing observations of students following safety procedures.
<ul style="list-style-type: none"> What are the camera systems? 	<ul style="list-style-type: none"> Identify the systems of a camera: Viewing/focusing, light control, image storage. Identify the F-stops & shutter speeds of the digital camera. Identify the purpose of lenses and their use. 	<ul style="list-style-type: none"> Digital camera Worksheets Supplementary text: Photo & Digital Imaging, published by Goodheart Willcox, 2002; ISBN 978-1-56637-879-6 	<ul style="list-style-type: none"> Students identify the components of the various systems on a worksheet as the instructor identifies and describes them. Collect various pictures used with various shutter speeds and F-stops, have them label the speeds and f-stops of each picture. Identify various lenses according to photos and appearance. 	
<ul style="list-style-type: none"> How do cameras store photos? What are the various types of flash memory available for digital cameras? 	<ul style="list-style-type: none"> Identify various file types such as JPEG, RAW and TIFF. Identify various memory card formats such as SD, microSD, XF and CF 	<ul style="list-style-type: none"> Memory Cards Worksheets Computer with network connection. Lecture / PowerPoint Presentation on subject. 	<ul style="list-style-type: none"> Compare the various types of file types and their advantages and disadvantages. Place all information into a table. Research and summarize the proper technique for using and maintaining memory cards. 	

<ul style="list-style-type: none"> • What are the lighting considerations when taking photographs? • What types of artificial lighting is available for use when taking photography? 	<ul style="list-style-type: none"> • Identify the basic characteristics of light and how they affect photography. • Identify the techniques for using existing natural light to take photographs. • Identify the types of artificial lighting available. • Exposure control when using a digital camera 	<ul style="list-style-type: none"> • Artificial light source • Digital cameras • http://www.lexar.com/dp/ • Supplementary text: Photo & Digital Imaging, published by Goodheart Willcox, 2002; ISBN 978-1-56637-879-6 	<ul style="list-style-type: none"> • Demonstrate the use of various artificial lights. • Capture images using various light sources to see the compare the results. • Demonstrate the use of white balance when discussing lighting choices in photography. 	
<ul style="list-style-type: none"> • What are the various camera handling techniques? 	<ul style="list-style-type: none"> • Describe the proper technique for handling and holding a camera. • Explain the advantages and disadvantages of using a tripod. 	<ul style="list-style-type: none"> • Digital cameras • http://www.lexar.com/dp/ • Supplementary text: Photo & Digital Imaging, published by Goodheart Willcox, 2002; ISBN 978-1-56637-879-6 	<ul style="list-style-type: none"> • Demonstrate the use of various camera handling techniques, including the use of a tripod. 	
<ul style="list-style-type: none"> • What are the techniques for capturing various scenes? 	<ul style="list-style-type: none"> • Take various pictures to adhere to compositional guidelines and shooting techniques such as rule of thirds, simplicity, mergers, lines, balance and framing. 	<ul style="list-style-type: none"> • Digital cameras • Memory cards • http://www.lexar.com/dp/ • Supplementary text: Photo & Digital Imaging, published by Goodheart Willcox, 2002; ISBN 978-1-56637-879-6 	<ul style="list-style-type: none"> • Present compositional guideline materials to students with samples of each guideline; have them fill out a worksheet identifying guidelines. • Have students bring in magazines and cut out various guidelines and label them, create a booklet as a review or reinforcement. • Students will go out on a photo shoot or digital pathway to take photos of compositional guidelines (rule of thirds, simplicity, mergers, lines, balance and framing), make sure they compile documentation that labels and captions each photograph with a cover page for all photo shoots. • Have students go out on a photo shoot and take action/sports photos, and still 	

			life, make sure they compile documentation that labels and captions each photograph with a cover page for all photo shoots.	
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Suggestions on how to differentiate in this unit: A hands-on approach to assignments and projects is recommended as the most effective method of learning. Students that fall behind may be teamed up with students whom excel in particular topics. Teacher should always adjust learning environment based on reluctant learners or special education needs.