

Board Approved August 2017

DEPARTMENT APPLIED TECH

COURSE: DIGITAL PHOTOGRAPHY II

Week	Marking Period 1(Quarters 1 & 2)	Week	Marking Period 3
1	Course Introduction & Elements of Digital Photography	21	
2	Using Your Camera: Visual Foundations & Workflow	22	
3	History and Future of Photography	23	
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5	Digital Image Output/Portfolio Development	25	
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15		35	
16		36	
17		37	
18		38	
19		39	
20		40	

<b>Time Frame</b>	<b>WEEK ONE</b>
<b>Topic</b>	
<b>Course Introduction &amp; Elements of Digital Photography</b>	
<b>Essential Questions</b>	
<ul style="list-style-type: none"> <li>• What is Digital Photography and how has it evolved?</li> <li>• What areas will be explored in the Digital Photography II course?</li> <li>• What projects will be accomplished in the course?</li> <li>• What are the student requirements in the Digital Photography II course?</li> <li>• How is the course grade determined?</li> <li>• What are the teacher expectations for student behavior in the Digital Photography II course?</li> <li>• What general safety measures should I be aware of in the classroom environment?</li> <li>• What safety measures should I be aware of when making photographs with electronic digital cameras and electrical lighting apparatus in the studio/ classroom?</li> <li>• What electrical safety measures should I be aware of when using computer equipment and printers in the classroom?</li> <li>• What physical responses should I conduct in the event of personal injury, peer injury, or school evacuation requirements?</li> </ul>	
<b>Enduring Understandings</b>	
<ul style="list-style-type: none"> <li>• Digital Photography II provides students with an understanding of the technological systems that extend the range of human communications, with an emphasis on visual communications and personal artistic expression. This course builds upon the fundamentals of digital image making addressed in Digital Photography I. Students completing the course will be able to describe, demonstrate, compare, analyze, integrate, and critique techniques and technologies related to advanced concepts of digital photography and scanning, ethical ramifications of the medium, and the evolution of digital technologies and implications for the future.</li> <li>• Digital Photography II Course Outline</li> <li>• Student responsibilities</li> <li>• Following safety rules prevents personal injury.</li> <li>• Use of electricity requires safe measures and awareness.</li> <li>• Hazardous conditions require personal attention and typically require evacuation.</li> <li>• Equipment associated with Digital Photography II requires safe measures and awareness.</li> </ul>	
<b>Alignment to NJSLS</b>	
TECH.8.1.12.A.1	
<b>Key Concepts and Skills</b>	
<ul style="list-style-type: none"> <li>• Digital Photography II Course Description</li> <li>• Course Unit Outlines</li> <li>• Course Requirements</li> <li>• Student Behavior Expectations</li> <li>• Basic project workflow</li> <li>• Safety</li> </ul>	
<b>Learning Activities</b>	
<ul style="list-style-type: none"> <li>• Digital Photography II Course Outline distribution and teacher presentation</li> <li>• Teacher contact information</li> <li>• Student use of school equipment including borrowing and explicit return policy</li> <li>• Student behavior while using school computers, software, and peripheral equipment</li> </ul>	

- Extra Help Days
- Edmodo.com and Google DRIVE student account sign-up for virtual classroom, course testing and project critique use
- Q&A period for students
- DSLR Camera & Studio Equipment Review

### Assessments

- Student/Parent Signature Acknowledgement Form for course outline & requirements.
- OTHS Digital Photography II Course Pre-Test (Benchmark I) via Edmodo
- OTHS Applied Technology Safety Test

### 21<sup>st</sup> Century Skills

x	Creativity	x	Critical Thinking	x	Communication	x	Collaboration
x	Life & Career Skills	x	Information Literacy	x	Media Literacy		

### Interdisciplinary Connections

Visual Arts, Technology, Language Arts, Math, Social Studies

### Technology Integration

- Digital SLR Cameras and related accessories
- Studio lighting: Monolights, Flash Meters, Radio Triggers
- Computer-based Photo Editing Software
- Internet-based resources for research and inspiration

## Time Frame

WEEK TWO

### Topic

#### Using Your Camera: Visual Foundations & Workflow

#### Essential Questions

- How is proper exposure determined in Manual mode?
- How does focal length relate to depth of field?
- How does focal length relate to composition?
- How does shutter speed effect expression of action in photography?
- How are digital images captured, archived, edited and presented?
- What is a histogram and how does it relate to exposure?

#### Enduring Understandings

- Camera modes and functions (Aperture, Shutter Speed, ISO, etc.)
- Camera handling and maintenance
- Characteristics of digital vs. traditional, different camera formats, lens types and viewing systems
- Making an exposure, characteristics of light and exposure value

#### Alignment to NJSLS

TECH.8.1.12.A.1

#### Key Concepts and Skills

- Principles and Elements of Design
- Basic photo project workflow
- Camera modes, functions, and accessories
- Safety

### Learning Activities

- Introduction to theme-based projects
- Artificial (studio strobes) and natural light studies
- “Depth of Field & Motion” project
- View and discuss important works of photographic art as they relate to theme-based student projects.
- Q&A period for students
- Ongoing DSLR Camera & Studio Equipment Review
- Create student blogs for image submission/critique

### Assessments

- Formative assessments via Edmodo.com and web-based student responder quizzes
- Student-led jury of submitted works

### 21<sup>st</sup> Century Skills

x	Creativity	x	Critical Thinking	x	Communication	x	Collaboration
x	Life & Career Skills	x	Information Literacy	x	Media Literacy		

### Interdisciplinary Connections

Visual Arts, Technology, Language Arts, Math, Social Studies

### Technology Integration

- Digital SLR Cameras and related accessories
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- Computer-based Photo Editing Software
- Internet-based resources for research and inspiration

<b>Time Frame</b>	<b>WEEK THREE</b>
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### Topic

**History and Future of Photography**

### Essential Questions

- How are 2-D artistic expression and visual communications linked?
- How has photography changed the culture of society?
- How has digital technology and the internet changed photography
- What ethical issues relate to the proliferation of digital images?

### Enduring Understandings

- Photography evolved as a tool to help 2-D artists express their views more accurately.
- As technological advancements were made, photography became a tool of mass communication (specifically visual communication), helping to inform, educate, and persuade society’s members.
- The digital revolution is forever changing many of the mechanics of photography, and is propelling the medium to the forefront of visual communications.

### Alignment to NJSLS

**VPA.1.4.12.B, TECH.8.2.12.B, TECH.8.1.12.D.1, TECH.8.1.12.F.1**

### Key Concepts and Skills

- Explanation of camera obscura (darkened chamber) principle.
- Scientific physics of a lens made camera obscura images brighter and more focused.
- Scientific chemistry created a light-sensitive emulsion able to record the camera obscura

image. Photography was born.

- As a visual communications tool, photographs can inform, educate, and persuade the viewer.
- Technological improvements brought photos to the masses of society, helping in the fields of journalism, advertising, science, & medicine.
- Electronics and computer technologies brought about the digital revolution in photography.
- Frontiers of photography are being explored with changes from 2-D to 3-D photographic representation, and with the medical replacement of human eyesight.

### Learning Activities

- Lecture/discussion/presentation on key concepts.
- Historical timeline related to the art and science of photography.
- Prezi research project on future trends and inventions in the fields of photography
- Theme-based project work related to a specific era/movement of photography (FSA photojournalism, Pictorialism, etc.)

### Assessments

- Prezi rubric
- Formative assessments via Edmodo.com and web-based student responder quizzes
- Student-led jury of submitted works

### 21<sup>st</sup> Century Skills

x	Creativity	x	Critical Thinking	x	Communication	x	Collaboration
x	Life & Career Skills	x	Information Literacy	x	Media Literacy		

### Interdisciplinary Connections

Visual Arts, Technology, Language Arts, Math, Social Studies

### Technology Integration

- Digital SLR Cameras and related accessories
- Studio lighting: Monolights, Flash Meters, Radio Triggers
- Computer-based Photo Editing Software
- Internet-based resources for research and inspiration

**Time Frame** | **WEEK FOUR**

### Topic

**Digital Image Output/Portfolio Development**

### Essential Questions

- What is the importance of a portfolio?
- What are typical presentation formats?
- What types/genres of images should be included?
- How can images be managed/archived using Adobe Lightroom/Bridge?
- How can I visually communicate my feelings and views?
- How can I help to visually communicate a subject's mood or view?
- How can viewing and judging other photographs help me to more effectively communicate my view and express myself?

### Enduring Understandings

- Use of Adobe Bridge as media manager
- Workflow through Adobe Lightroom and Photoshop CC

- Vernacular of photography for use in critical viewing
- Understanding the technical specs. of tools and equipment can allow one to express creativity optimally
- High quality photographs require sound knowledge of the equipment used to create the image
- Evaluating and interpreting the expression or story in other photographs fosters one's own creativity and communicative skills

### Alignment to NJSLs

#### TECH.8.1.12.A.1

#### Key Concepts and Skills

- Determining strong work based on criteria
- Artistic design elements include: line, shape/form, and texture. (Also, color; covered later in course.)
- Guidelines of photocomposition include: simplicity, rule of thirds, leading lines, balance, framing, avoiding mergers, among others.
- Use of camera accessories and auxiliary equipment can help to increase the quality of photographs being made.
- Critiquing of photographs includes the evaluations of communicative value, presentation, and technical elements.

#### Learning Activities

- Theme-based project exploration, development of "Artist Statements"
- Artificial (studio strobes) and natural light studies
- "Environmental Portrait" project
- View and discuss important works of photographic art as they relate to theme-based student projects.
- Printing color and B&W images to high quality photo paper and using a heat press to dry-mount photos for gallery presentation
- Q&A period for students
- Ongoing DSLR Camera & Studio Equipment Review
- Student blog maintenance - image submission/critique/reflection

#### Assessments

- Formative assessments via Edmodo.com and web-based student responder quizzes
- Student-led jury of submitted works

#### 21<sup>st</sup> Century Skills

x	Creativity	x	Critical Thinking	x	Communication	x	Collaboration
x	Life & Career Skills	x	Information Literacy	x	Media Literacy		

#### Interdisciplinary Connections

Visual Arts, Technology, Language Arts, Math, Social Studies

#### Technology Integration

- Digital SLR Cameras and related accessories
- Studio lighting: Monolights, Flash Meters, Radio Triggers
- Computer-based Photo Editing Software
- Internet-based resources for research and inspiration

<b>Time Frame</b>		<b>WEEK FIVE</b>					
<b>Topic</b>							
<b>Lighting Conditions and Challenges/Personal Theme Term Projects</b>							
<b>Essential Questions</b>							
<ul style="list-style-type: none"> <li>• How do lighting conditions determine exposure?</li> <li>• What approaches are best-suited for determining proper exposure in given lighting?</li> <li>• How is a histogram used?</li> <li>• What type of metering should be used (center-weighted, matrix, etc.)?</li> <li>• What is exposure compensation?</li> <li>• How can a flash meter be used to control exposure in the studio?</li> </ul>							
<b>Enduring Understandings</b>							
<ul style="list-style-type: none"> <li>• Use of artificial and natural light</li> <li>• In-camera Bracketing</li> <li>• Exposure controls</li> <li>• Filter factors</li> <li>• Flash meter, F-stop output as it relates to aperture</li> <li>• ISO and “exposure triangle”</li> </ul>							
<b>Alignment to NJSLS</b>							
<b>VPA.4.12.B, TECH.8.1.12.F, TECH.8.2.12.C.CS1</b>							
<b>Key Concepts and Skills</b>							
<ul style="list-style-type: none"> <li>• Exposure controls in camera: light on scene determines time lapse of shutter (speeds) and the volume size of lens opening (aperture).</li> <li>• Skills needed in holding camera for sharply focused photographs.</li> </ul>							
<b>Learning Activities</b>							
<ul style="list-style-type: none"> <li>• Theme-based project exploration</li> <li>• Artificial (studio strobes) and natural light studies</li> <li>• “Light &amp; Shadow as Subject” project</li> <li>• View and discuss important works of photographic art as they relate to theme-based student projects.</li> <li>• Q&amp;A period for students</li> <li>• Ongoing DSLR Camera &amp; Studio Equipment Review</li> <li>• Student blog maintenance - image submission/critique/reflection</li> </ul>							
<b>Assessments</b>							
<ul style="list-style-type: none"> <li>• Formative assessments via Edmodo.com and web-based student responder quizzes</li> <li>• Student-led jury of submitted works</li> </ul>							
<b>21<sup>st</sup> Century Skills</b>							
x	Creativity	x	Critical Thinking	x	Communication	x	Collaboration
x	Life & Career Skills	x	Information Literacy	x	Media Literacy		
<b>Interdisciplinary Connections</b>							
Visual Arts, Technology, Language Arts, Math, Social Studies							
<b>Technology Integration</b>							
<ul style="list-style-type: none"> <li>• Digital SLR Cameras and related accessories</li> <li>• Studio lighting: Monolights, Flash Meters, Radio Triggers</li> <li>• Computer-based Photo Editing Software</li> <li>• Internet-based resources for research and inspiration</li> </ul>							

- Desktop photo scanner/digitizer

<b>Time Frame</b>		<b>WEEK SIX</b>					
<b>Topic</b>							
<b>Photoshop vs. In-camera Controls</b>							
<b>Essential Questions</b>							
<ul style="list-style-type: none"> <li>• When is the use of Photoshop warranted in straight photography?</li> <li>• What are the most often-used Photoshop tools in repairing/improving images?</li> <li>• How can Photoshop be used for artistic effect to enhance expression?</li> <li>• What are ethical issues surrounding the use of Photoshop (or any image editor)?</li> <li>• What approaches are best-suited for determining proper exposure in given lighting?</li> <li>• How is a histogram used?</li> <li>• What type of metering should be used (center-weighted, matrix, etc.)?</li> <li>• What is exposure compensation?</li> <li>• How can a flash meter be used to control exposure in the studio?</li> </ul>							
<b>Enduring Understandings</b>							
<ul style="list-style-type: none"> <li>• Basic and advanced knowledge of Adobe Photoshop tools</li> <li>• In-camera exposure control (continued)</li> <li>• In-camera composition control (cropping, use of Ro3 guidelines, tripods, etc.)</li> <li>• Application of filters in Photoshop</li> </ul>							
<b>Alignment to NJSLs</b>							
<b>TECH.8.1.12.A.1</b>							
<b>Key Concepts and Skills</b>							
<ul style="list-style-type: none"> <li>• Exposure controls in camera: light on scene determines time lapse of shutter (speeds) and the volume size of lens opening (aperture).</li> <li>• Photoshop Toolbar and related functions</li> <li>• Workflow (continued)</li> </ul>							
<b>Learning Activities</b>							
<ul style="list-style-type: none"> <li>• Theme-based project exploration</li> <li>• Artificial (studio strobes) and natural light studies</li> <li>• Double Exposure, and “Photography as Fine Art” projects</li> <li>• Use of desktop photo scanner/digitizer for “Scanner as Camera” project</li> <li>• View and discuss important works of photographic and fine art as they relate to theme-based student projects.</li> <li>• Watch “This Is Not Photography” documentary movie about Jerry Uelsmann and Maggie Taylor</li> <li>• Q&amp;A period for students</li> <li>• Ongoing DSLR Camera &amp; Studio Equipment Review</li> <li>• Student blog maintenance - image submission/critique/reflection</li> </ul>							
<b>Assessments</b>							
<ul style="list-style-type: none"> <li>• Formative assessments via Edmodo.com and web-based student responder quizzes</li> <li>• Student-led jury of submitted works</li> </ul>							
<b>21<sup>st</sup> Century Skills</b>							
x	Creativity	x	Critical Thinking	x	Communication	x	Collaboration
x	Life & Career	x	Information	x	Media Literacy		



Skills

Literacy

**Interdisciplinary Connections**

Visual Arts, Technology, Language Arts, Math, Social Studies

**Technology Integration**

- Digital SLR Cameras and related accessories
- Studio lighting: Monolights, Flash Meters, Radio Triggers
- Computer-based Photo Editing Software
- Internet-based resources for research and inspiration
- Desktop photo scanner/digitizer

**Time Frame****WEEK SEVEN****Topic****High Dynamic Range, Photomerge and Collage****Essential Questions**

- What is a high dynamic range photograph?
- How is an HDR photograph created?
- How can HDR, Photomerge and Collage techniques be used for artistic expression and commercial applications?

**Enduring Understandings**

- Advanced knowledge of Adobe Photoshop tools
- In-camera exposure control and advanced image capture techniques – Bracketing, panning, multiple frame shooting mode
- In-camera composition control (cropping, use of Ro3 guidelines, tripods, etc.) - continued

**Alignment to NJSLs****TECH.8.1.12.A.1****Key Concepts and Skills**

- Exposure controls in camera: light on scene determines time lapse of shutter (speeds) and the volume size of lens opening (aperture).
- Servo focus, manual focus and multiple frame shooting
- Photoshop Toolbar, Layer management, Layer blending, Photomerge, etc.
- Workflow (continued)

**Learning Activities**

- Theme-based project exploration
- Artificial (studio strobes) and natural light studies
- Collage, HDR and Photomerge projects
- “Diptych and Triptych” projects
- View and discuss important works of photographic and fine art as they relate to theme-based student projects.
- Q&A period for students
- Ongoing DSLR Camera & Studio Equipment Review
- Student blog maintenance - image submission/critique/reflection

**Assessments**

- Formative assessments via Edmodo.com and web-based student responder quizzes
- Student-led jury of submitted works

**21<sup>st</sup> Century Skills**

x	Creativity	x	Critical Thinking	x	Communication	x	Collaboration
x	Life & Career Skills	x	Information Literacy	x	Media Literacy		

**Interdisciplinary Connections**

Visual Arts, Technology, Language Arts, Math, Social Studies

**Technology Integration**

- Digital SLR Cameras and related accessories
- Studio lighting: Monolights, Flash Meters, Radio Triggers
- Computer-based Photo Editing Software
- Internet-based resources for research and inspiration
- Desktop photo scanner/digitizer

**Time Frame** | **WEEK EIGHT****Topic****Personal Theme Projects Critique/Edit****Essential Questions**

- What constitutes a strong photographic image?
- What style/genre appeals to me personally? Is this where my exploration should begin?
- What aesthetic or technical requirements will my images demand?
- Is my project feasible per budget/logistical constraints?
- How can I pay homage to an artist without plagiarizing?
- What photographic career might I best be suited for?

**Enduring Understandings**

- Most photographs focus on a specific topic and contain a particular point of view (POV)
- Variety of photographic genres – Fine Art, Editorial/Fashion, Product, Documentary, Street, Social, etc.
- There are a variety of approaches to finding and developing subject matter for short and long term photo studies
- Advanced knowledge of Adobe Photoshop tools (continued)
- In-camera exposure control and advanced image capture techniques – Bracketing, panning, multiple frame shooting mode (continued)
- In-camera composition control (cropping, use of Ro3 guidelines, tripods, etc.) - continued

**Alignment to NJSLs****TECH.8.1.12.A.1****Key Concepts and Skills**

- Criteria/constraints associated with making visual art
- Exposure controls in camera: light on scene determines time lapse of shutter (speeds) and the volume size of lens opening (aperture).
- Servo focus, manual focus and multiple frame shooting
- Photoshop Toolbar, Layer management, Layer blending, Photomerge, etc.
- Workflow (continued)

**Learning Activities**

- Theme-based project exploration
- Artificial (studio strobes) and natural light studies

- “In the Style Of...” projects
- Watch “Waste Land” or “Rivers and Tides” DVD to address the development of personal artistic voice
- View and discuss important works of photographic and fine art as they relate to theme-based student projects.
- Q&A period for students
- Ongoing DSLR Camera & Studio Equipment Review
- Student blog maintenance - image submission/critique/reflection

### Assessments

- Formative assessments via Edmodo.com and web-based student responder quizzes
- Student-led jury of submitted works

### 21<sup>st</sup> Century Skills

x	Creativity	x	Critical Thinking	x	Communication	x	Collaboration
x	Life & Career Skills	x	Information Literacy	x	Media Literacy		

### Interdisciplinary Connections

Visual Arts, Technology, Language Arts, Math, Social Studies

### Technology Integration

- Digital SLR Cameras and related accessories
- Studio lighting: Monolights, Flash Meters, Radio Triggers
- Computer-based Photo Editing Software
- Internet-based resources for research and inspiration
- Desktop photo scanner/digitizer

<b>Time Frame</b>	<b>WEEK NINE</b>
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### Topic

**Editing Final Portfolio / Print Output**

### Essential Questions

- What images should be included in my portfolio?
- What images still require editing or re-shooting?
- Which bodies of work best represent me as an artist?

### Enduring Understandings

- Use of Adobe Bridge as media manager
- Workflow through Adobe Lightroom and Photoshop CC
- Use of PREZI for online, dynamic portfolio presentation
- Vernacular of photography for use in critical viewing
- Understanding the technical specs. of tools and equipment can allow one to express creativity optimally
- High quality photographs require sound knowledge of the equipment used to create the image
- Evaluating and interpreting the expression or story in other photographs fosters one’s own creativity and communicative skills

## Alignment to NJSLS

### TECH.8.1.12.A.1

#### Key Concepts and Skills

- Determining strong work based on criteria (continued)
- Artistic design elements include: line, shape/form, and texture. (Also, color; covered later in course.)
- Guidelines of photocomposition include: simplicity, rule of thirds, leading lines, balance, framing, avoiding mergers, among others.
- Use of camera accessories and auxiliary equipment can help to increase the quality of photographs being made.
- Critiquing of photographs includes the evaluations of communicative value, presentation, and technical elements.

#### Learning Activities

- Theme-based project conclusion/portfolio assembly and editing
- Artificial (studio strobes) and natural light studies
- Any additional personal projects students wish to explore
- Watch “Salt of the Earth” documentary re: Sebastiao Salgado
- View and discuss important works of photographic and fine art as they relate to theme-based student projects.
- Q&A period for students
- Ongoing DSLR Camera & Studio Equipment Review
- Student blog maintenance - FINAL image submission/critique/reflection
- Refining and publishing of artist statements to blogs with portfolios

#### Assessments

- Formative assessments via Edmodo.com and web-based student responder quizzes
- Student-led jury of submitted works

#### 21<sup>st</sup> Century Skills

x	Creativity	x	Critical Thinking	x	Communication	x	Collaboration
x	Life & Career Skills	x	Information Literacy	x	Media Literacy		

#### Interdisciplinary Connections

Visual Arts, Technology, Language Arts, Math, Social Studies

#### Technology Integration

- Digital SLR Cameras and related accessories
- Studio lighting: Monolights, Flash Meters, Radio Triggers
- Computer-based Photo Editing Software
- Internet-based resources for research and inspiration
- Desktop photo scanner/digitizer