

## Digital Imaging and Design Seminar

Curriculum Area: Visual Art & Design	Course Length: 1 Term
Course Titles: Digital Imaging and Design Seminar	Date last reviewed: December 5, 2017
Prerequisites: Digital Imaging and Design I and II	Board approval date: June 16, 2015

### Desired Results

#### Course Description and Purpose:

This semester long course is designed for those students who have successfully completed Digital Imaging and Design I and II and are interested in engaging in advanced study in the areas of digital imaging (web and multimedia), photography, graphic design, printing or related fields. Through a variety of real world applications students will apply the skills and concepts learned in previous imaging courses in the creation of images for, but not limited to, the school newspaper, yearbook, web pages, displays and community groups. The class functions as a business providing design and reproduction services to the school community. Students will also be given the opportunity to explore an independent study, project based activity furthering their knowledge of specific imaging disciplines. A fee is charged for materials used in projects.

<b>Enduring Understandings (EUs):</b> The student will understand that... <ol style="list-style-type: none"><li>1. Media arts ideas, works, and processes are shaped by the imagination, creative processes, and by experiences, both within and outside of the arts.</li><li>2. Media artists plan, organize, and develop creative ideas, plans, and models into process structures that can effectively realize the artistic idea.</li><li>3. The forming, integration, and refinement of aesthetic components, principles, and processes creates purpose, meaning, and artistic quality in media artworks. Storytelling through digital and visual means is a powerful and effective method of communicating a message to an audience.</li><li>4. Media artists integrate various forms and contents to develop complex, unified artworks.</li></ol>	<b>Essential Questions (EQs):</b> <ol style="list-style-type: none"><li>1. How do media artists generate ideas? How can ideas for media arts productions be formed and developed to be effective and original?</li><li>2. How do media artists organize and develop ideas and models into process structures to achieve the desired end product?</li><li>3. What is required to produce a media artwork that conveys purpose, meaning, and artistic quality? How do media artists improve/refine their work?</li><li>4. How are complex media arts experiences constructed?</li><li>5. What skills are required for creating effective media artworks and how are they improved? How are creativity and innovation developed within and through media arts productions? How do media artists use various tools and techniques?</li></ol>
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<ol style="list-style-type: none"> <li>5. Media artists require a range of skills and abilities to creatively solve problems within and through media arts productions.</li> <li>6. Media artists purposefully present, share, and distribute media artworks for various contexts.</li> <li>7. Interpretation and appreciation require consideration of the intent, form, and context of the media and artwork.</li> <li>8. Skillful evaluation and critique are critical components of experiencing, appreciating, and producing media artworks.</li> <li>9. Media artworks synthesize meaning and form cultural experience.</li> <li>10. Media artworks and ideas are better understood and produced by relating them to their purposes, values, and various contexts.</li> </ol>	<ol style="list-style-type: none"> <li>6. How does time, place, audience, and context affect presenting or performing choices for media artworks? How can presenting or sharing media artworks in a public format help a media artist learn and grow?</li> <li>7. How do people relate to and interpret media artworks?</li> <li>8. How and why do media artists value and judge media artworks? When and how should we evaluate and critique media artworks to improve them?</li> <li>9. How do we relate knowledge and experiences to understanding and making media artworks? How do we learn about and create meaning through producing media artworks?</li> <li>10. How does media arts relate to its various contexts, purposes, and values? How does investigating these relationships inform and deepen the media artist's understanding and work?</li> </ol>
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Assessment Evidence:

<p><b>Performance assessments:</b> Project based assessments will be used in all units to assess student mastery. In addition other performance assessments will include web based portfolios, gallery displays, performance tests and journals as well as customer evaluations</p>	<p>Other assessments:</p> <ul style="list-style-type: none"> <li>● Formative assignments</li> <li>● Quizzes</li> <li>● Demonstrations</li> </ul>
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UNITS
<ol style="list-style-type: none"> <li>1. Image Creation - Input</li> <li>2. Image Processing</li> <li>3. Graphic Design</li> <li>4. Image Output</li> <li>5. Careers in Visual Communication/Digital Media and the Arts</li> </ol>

## Unit 1: Image Creation - Input

1. History and context of digital imaging
2. Digital imaging and its relationship to digital photography and illustration
3. Components: Input, image processing, output
4. Communication model and process
5. Photography and image capture
6. Raster image creation - Photoshop
7. Vector image creation - Illustrator

### Standards:

#### **Anchor Standard 11: Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding**

MA:Cn11.1.IIIb: Critically investigate and strategically interact with legal, technological, systemic, and vocational contexts of media arts.

#### **Anchor Standard 1: Generate and conceptualize artistic ideas and work.**

MA:Cr1.1.III: Integrate aesthetic principles with a variety of generative methods to fluently form original ideas, solutions, and innovations in media arts creation processes.

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CCSS.ELA-Literacy.SL.9-10.4

Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.

CCSS.ELA-LITERACY.RST.11-12.7

Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

### Learning Targets Addressed:

I can...

- Plan a product containing aspects including input, image processing and output as they relate to a digital image.
- Differentiate and apply the parts of the communication process/model to a design and create an image employing them and fulfilling a customer's need.
- Justify the correct application of various input devices (cameras, scanners, etc.) to capture an image.
- Manipulate and process an image using industry standard image processing software.
- Devise and communicate a plan for solving a customer's design needs or problems.
- Assess safety hazards in the workplace.
- Critically judge a photographic composition and apply it within a graphic design.

## Unit 2: Image Processing

1. Raster Based Images
2. Vector Based Images
3. Video Production

### Standards:

#### **Anchor Standard 4: Select, analyze, and interpret artistic work for presentation.**

VA:Pr4.1.IIIa: critique personal artwork for a collection or portfolio presentation. Critique, justify, and present choices in the process of analyzing, selecting, curating, and presenting artwork for a specific exhibit or event.

MA:Pr4.1.III: Synthesize various arts, media arts forms and academic content into unified media arts productions that retain artistic fidelity across platforms, such as transdisciplinary productions

#### **Anchor Standard 10: Synthesize and relate knowledge and personal experiences to make art.**

MA:Cn10.1.IIIa: Synthesize knowledge of social, cultural, historical, and personal life with art-making approaches to create meaningful works of art or design.

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### Learning Targets Addressed:

#### **Adobe Photoshop Tasks (Tied to Adobe Certification Exam)**

##### **I can use Adobe Bridge to as a file management tool within and across the Adobe product line.**

Managing Assets Using Adobe Bridge

- Navigating between Adobe Bridge and your computer
- Working with metadata
- Organizing collections
- Outputting projects to PDF and for the web
- Automating multiple images in Bridge

##### **I can create and modify camera raw images within Adobe Photoshop.**

Using Camera Raw

- Basic single image adjustment

- Selective image corrections
- Batch processing and editing
- Understanding Process Version and workflow options
- Automating multiple images

**I can navigate Photoshop and understand the application of all of its tools.**

Understanding Photoshop Fundamentals

- Navigating the Photoshop workspace
- Importing and exporting presets
- Resetting sliders and options
- Using tool groups and options

**I can create and isolate a selection using masks and layers within Adobe Photoshop**

Understanding Selections

- Creating selections using appropriate tools
- Adding and subtracting from selections
- Quick Mask usage
- Using Refined Edge

Understanding Layers

- Creating and organizing layers
- Understanding the differences between raster and vector layers
- Understanding layer masks
- Searching for layers
- Understanding layer groups
- Understanding layer blend modes

**I can adjust an image for color, tonal range, curves and levels with Adobe Photoshop.**

Understanding Adjustments

- Differentiating between adjustment types
- Using TAT, clipping, and visibility
- Refining masks on adjustments

**I can successfully edit an image using the tools with Adobe Photoshop to transform an image.**

Editing Images

- Working with the retouching tools
- Working with Liquify
- Using the transform controls
- Using the Puppet Warp
- Using the Clone Source tool
- Creating panoramas
- Using HDR Pro
- Creating speciality images (black and white and duotone)
- Selecting color

**I can apply character and paragraph styles to work in a production setting in Adobe Photoshop.**

Working with Design and Print Production

- Using character and paragraph styles
- Using vector shapes
- Working with layer comps
- Creating frame based animations

- Working with layer styles

### **I can create a simple animation and video sequence within Adobe Photoshop**

#### Working with Video

- Ingesting video into Photoshop
- Cutting and trimming video
- Creating transitions within clips
- Adding design elements into video
- Exporting and publishing video
- Using LUT adjustments for style

### **I can prepare and publish my images in correct formats**

#### Outputting for Web, Print, and Mobile

- Differentiating between file types
- Using Save For Web
- Using the Print dialog

### **Adobe Illustrator Tasks (Tied to Adobe Certification Exam)**

### **I can navigate the Illustrator workspace in order to create images.**

#### Navigating the Workspace

- Customizing the workspace
- Using multiple artboards
- Utilizing rulers, grids, guides, and crop marks

### **I can create elaborate and advanced level drawing using Adobe Illustrator**

#### Drawing

- Drawing basics
- Creating shapes
- Drawing pixel-aligned paths for web workflows
- Drawing with the Pencil tool
- Drawing with the Pen tool
- Editing paths
- Applying a gradient to a stroke
- Perspective drawing
- Tracing artwork with Live Trace
- Using Image Trace
- Working with symbols
- Working with symbolism tools and sets

### **I can creatively use color and color schemes with Adobe Illustrator**

#### Working with Color

- Selecting color
- Using and creating swatches
- Adding colors from artwork to the Swatches panel
- Working with Color Groups
- Using the Kuler panel
- Adjusting color
- Working with Pantone Plus color libraries

### **I can create advanced images using the painting tools in Illustrator**

#### Painting

- Painting with fills and strokes

- Working with Live Paint groups
- Creating and using brushes
- Working with transparency and blending modes
- Creating and using gradients
- Creating and using meshes
- Creating and using patterns

**I can create and manipulate type for graphic design in Adobe Illustrator**

Working with Type

- Creating type on a path
- Scaling and rotating type
- Working with fonts
- Formatting type
- Adjusting line and character spacing
- Formatting paragraphs
- Creating and applying character and paragraph styles

**I can apply special effects to vector based images in Adobe Illustrator**

Creating Special Effects

- Creating and using appearance attributes
- Working with effects
- Creating and applying drop shadows, glows, and feathering
- Creating and applying graphic styles

**I can animate an image for the web using Adobe Illustrator**

Working with Web Graphics

- Creating web graphics
- Utilizing slices and image maps
- Utilizing SVG
- Creating animations

**I understand and can prepare images for a variety of output methods using Illustrator**

Printing

- Setting up documents for printing
- Printing color separations
- Working with printer and bleed marks
- Printing gradients, meshes, and color blends
- Printing and saving transparent artwork
- Overprinting
- Trapping
- Using print presets

**Adobe InDesign Tasks (aligned with Adobe Certification Exam)**

**I can create a properly formatted document in InDesign**

Create short and long documents with both text and graphics

- Navigate the Document Window
- Create basic interactive documents
- Export high quality PDF documents appropriate for print and interactive purposes
- Troubleshoot issues related to page layout

Layout out a Document

- Creating a new document

- Navigating and viewing documents
- Constructing a flexible foundation for multi-page document
- Precisely position objects on a page
- Modify and transform objects
- Ensure the consistency of objects' formatting throughout a document or publication
- Building documents for alternate layouts and print sizes
- Creating data-driven documents

**I can manage, manipulate and format text and typography within an Indesign document**

Working with Text

- Create and position text in a frame and on a path
- Managing text flow
- Importing and editing text
- Applying formatting manually and automatically
- Inserting special characters
- Creating tables
- Adding long document features

**I can create, manipulate and manage graphics within a digital document**

Managing Graphics

- Placing and altering graphics
- Working with linked files
- Adjusting graphic formatting and display

**I can manage and discern proper color settings and applications within an InDesign page document**

Understanding Color and Transparency

- Creating and applying colors
- Working with gradients
- Applying transparency
- Color and ink management

**I can build and manage interactive documents within InDesign**

Building Interactive Documents

- Adding interactive objects and behaviors
- Adjusting interactive behaviors
- Previewing and exporting interactive documents

**I can prepare and publish final printed documents**

Preparing Documents for Final Output

- Preflighting documents
- Exporting PDF for print output
- Printing documents

**Unit 3: Graphic Design**

1. Language of graphic design
2. Color theory concepts and terminology
3. Color systems (RGB,CMYK,Pantone): applications



4. Two-dimensional imaging concepts of composition and aesthetics
5. Typography

**Standards:**

**Anchor Standard 2: Organize and develop artistic ideas and work.**

VA:Cr2.1.IIIa: Experiment, plan, and make multiple works of art and design that explore a personally meaningful theme, idea, or concept.

**Anchor Standard 5: Develop and refine artistic techniques and work for presentation.**

MA:Pr5.1.IIIa: Investigate, compare, and contrast methods for preserving and protecting art.

**Anchor Standard 6: Convey meaning through the presentation of artistic work.**

MA:Pr6.1.IIIa: Curate, design, and promote the presentation and distribution of media artworks for intentional impacts, through a variety of contexts, such as markets and venues.

**Anchor Standard 7: Perceive and analyze artistic work**

MA:Re7.1.IIIa: Analyze and synthesize the qualities and relationships of the components and audience impact in a variety media artworks.

**Anchor Standard 11: Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding.**

MA:Cn10.1.IIIa: Demonstrate the relationships of media arts ideas and works to personal and global contexts, purposes, and values, through relevant and impactful media artworks

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CCSS.ELA-LITERACY.RST.11-12.9

Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

**Learning Targets Addressed:**

**I can...**

- Create a visual image incorporating graphics (art), photography and type.
- Create a design to fulfill a need for a customer.
- Apply a creative process (research, roughs, revise and finalize) to solve a graphic design problem.
- Analyze a designed image using the language of graphic design.

## Unit 4: Image Output

1. Web and Digital
2. Print
  - a. Offset
  - b. Flexography
  - c. Gravure
  - d. Screen
  - e. Digital
  - f. Specialty
3. Specialty
  - a. Vinyl Cutting
  - b. Laser Engraving
  - c. Ink Jet
  - d. Xerography

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Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

### Learning Targets Addressed:

#### I can...

- Apply the digital workflow steps and prepare an image for appropriate output including web/digital or print.

- Demonstrate the differences between output in regards to both pixels and dots per inch (resolution).
- Analyze the appropriate output and reproduction method for a printed product based upon both quality and cost.
- Produce a quality digital and printed product via a multitude of methods.

### **Unit 5: Careers in Visual Communication/Digital Media and the Arts**

1. Existing and emerging careers
2. Matching and applying your skill set to a career
3. Exploring avenues for training, mentoring/shadowing
4. Employability skills and traits

#### **Standards:**

#### **Anchor Standard 11: Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding**

MA:Cn11.1.IIIb. Critically investigate and strategically interact with legal, technological, systemic, and vocational contexts of media arts.

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#### **Learning Targets Addressed:**

##### **I can...**

- Apply the skills learned in class to a potential career.
- Research various careers in emerging career areas that relate to the imaging techniques and skills attained in class.
- Perform well in a job interview highlighting my employability skills and talent.
- Function as a productive employee demonstrating professionalism, respect, time management and responsibility.