

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ACADEMIC AFFAIRS

Course Number: GRPH 462 Department: Graphic Arts Technology

Course Title: Digital Imaging Preparation Semester: Spring Year: 1999

Objectives/Competencies

Course Objective	Competencies
1. Students will demonstrate a working knowledge of the Adobe Photoshop Program.	<ol style="list-style-type: none">1. Use appropriately the basic terminology of digital imaging.2. Determine the proper scanning resolution and line screen needed to properly reproduce artwork based on the printing or display method used.3. Comprehend color theory and demonstrate color correction methodology on bitmapped images, and demonstrate the process of tone-targeting grayscale images.4. Demonstrate the methods of making object-based selections and selection modifications.5. Discern how multiple layer compositing affects an image, and how to use the l7 layer and brush blending modes.6. Combine multiple images to crate realistic effects.7. Demonstrate the process of retouching and restoring original images using the rubber stamp tool and other painting tools.8. Simulate photo-realistic depth-of-field in bitmapped

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<p>2. Students will learn how to scan and process the resulting digital image to meet the requirements of specific printing processes.</p> <p>3. Students will learn to work effectively with service bureaus, prepress providers, and printers.</p>	<p>images.</p> <p>9. Create photo-realistic reflections and shadows in bitmapped images.</p> <p>10. Utilize transformation and other perspective-changing tools to modify bitmapped images.</p> <p>11. Demonstrate Photoshop's typographical controls.</p> <p>12. Work with paths and EPS objects in Photoshop.</p> <p>13. Apply Photoshop filters and plug-ins to bitmapped images.</p> <p>14. Identify how Photoshop images can be used with the World Wide Web.</p> <p>1. Determine how the image will be printed or displayed.</p> <p>2. Determine the proper line screen and number of gray levels desired for the printing process used, and the proper scanning resolution needed.</p> <p>3. Determine proper color correction and tonal targeting ranges of scanned image.</p> <p>1. Prepare Photoshop file by saving to proper format to be output on a high resolution imagesetter.</p> <p>2. Ensure that the resolution of the Photoshop image is appropriate for the output device used.</p> <p>3. Print hardcopy composite output of the document at 100% and all color separations, as well as the output form provided by service bureau or prepress provider to determine file type and number of color separations</p>

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<p>4. Students will be able to produce realistic-looking images through the proper use of perspective, design, and image processing tools.</p> <p>5. Students will learn how to create a variety of special effects and utilize a wide array of filters and plug-ins.</p> <p>6. Students will have a basic understanding of how Adobe Photoshop can be used with and improve images on the World Wide Web.</p> <p>7. Students will produce a wide range of potential portfolio images using Adobe Photoshop.</p>	<p>desired.</p> <ol style="list-style-type: none"> 1. Create photo-realistic effects by simulating perspective by the use of transformation and color matching techniques. 2. Create photo-realistic depth-of-field in a composited image through the selective use of blurring and tonal/color correction. 3. Create photo-realistic reflections and shadows by working with channel masks, removal of unnecessary detail, creation of a reflection and shadow, and the calculation of the reflection and shadow angle. <ol style="list-style-type: none"> 1. Identify which effects can be applied to RGB images, and which can be applied to CMYK images. 2. Demonstrate how to convert a CMYK image to RGB to utilize additional filters and plug-ins. 3. Identify how each category of filter or plug-in will modify an image. <ol style="list-style-type: none"> 1. State how each of the Photoshop file format options work with the World Wide Web for type-based images, simple graphic images, and larger, complicated graphic images. 2. Utilize the Indexed Color command to reduce the number of colors to be displayed to the web browser. 3. Choose the proper resolution for an image for the WWW.

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	<ol style="list-style-type: none">1. Produce images that composite two or more elements from different sources in a photo-realistic way.2. Design and create original artwork using Photoshop's painting and drawing tools.3. Produce images that combine EPS and Illustrator objects with Photoshop's bitmapped images.4. Create special effects by applying a wide variety of filters, plug-ins, and transformations to a bitmapped image.