

**COURSE COM3210: DIGITAL IMAGING 3****Level:** Advanced**Theme:** Photography**Prerequisite:** None**Description:** Students will apply advanced digital imaging software and techniques to develop a digital portfolio that demonstrates creativity and attention to aesthetic concerns. The course requires students to complete a number of projects consistent with assignments frequently encountered in the work world.**Parameters:** Access to a digital camera and two or more other sources of digital images (e.g., Internet, CD-ROM, scanner, screen capture software, other software that can export bitmap files), computer(s) with bitmap editing software and digital storage (e.g., zip drive, CD-ROM writer, hard drive, network drive).**Supporting Courses:** COM3010 Presentation & Communication 3  
DES3190 Portfolio Presentation  
Art 30 – portfolio creation**Curriculum and Assessment Standards**

General Outcomes	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> <li>• acquire, edit, composite and manipulate images from:               <ul style="list-style-type: none"> <li>– a digital camera</li> <li>– two or more other sources for creating or acquiring digital images</li> </ul> </li> </ul>	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> <li>• a portfolio of three to five bitmap composition projects that simulate work world assignments or, if possible, are work world assignments. Each project should:               <ul style="list-style-type: none"> <li>– specify a theme or outline a specific set of parameters within which the project was completed</li> <li>– require four to six image solutions</li> <li>– have different resolution and size restrictions</li> <li>– include notes explaining how each image was constructed</li> <li>– be completed according to specific deadlines</li> <li>– specify a file type for the final work</li> <li>– be saved to a portfolio; e.g., CD-ROM, print format</li> </ul> </li> <li>• one or more of the projects should demonstrate the acquisition of images from multiple source files; i.e., composite imaging</li> </ul> <p><i>Illustrative Examples</i>  <i>Sample Work World Projects, COM3210–1</i></p> <p><i>Assessment Tool</i>  <i>Portfolio Assessment, COM3210–2</i></p> <p><i>Standard</i>  <i>Performance rating of 3 for each criteria</i></p>	60

**COURSE COM3210: DIGITAL IMAGING 3 (continued)**

General Outcomes	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> <li>• demonstrate knowledge and control of aesthetics, technical processes and software tools</li> </ul>	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> <li>• application of a variety of techniques and tools consistent with the requirements of the assignment. The applied techniques and tools should demonstrate:               <ul style="list-style-type: none"> <li>– composite imaging, including advanced masking and layer control</li> <li>– a variety of filters, effects and plug-in manipulations that are suited to the assignment</li> <li>– control over file format, size, resampling, resolution and other specified factors</li> <li>– compositional and aesthetic awareness</li> <li>– creative problem solving</li> <li>– control over digital processes; e.g., camera, scanner, software</li> </ul> </li> </ul> <p><i>Assessment Tool</i> <i>Portfolio Assessment, COM3210–2</i></p> <p><i>Standard</i> <i>Performance rating of 3 for each criteria</i></p>	<p>20</p>
<ul style="list-style-type: none"> <li>• present finished compositions in a portfolio suitable for post-secondary application</li> </ul>	<ul style="list-style-type: none"> <li>• presentation of a portfolio that includes 12 or more finished bitmap compositions. The portfolio must:               <ul style="list-style-type: none"> <li>– describe how each composition was created and saved through appropriate text notes</li> <li>– illustrate compositional control</li> <li>– demonstrate refined aesthetic awareness</li> <li>– be suitable for entry-level employment or post-secondary application</li> </ul> </li> </ul> <p><i>Assessment Tool</i> <i>Presentations/Reports, COM3210–3</i></p> <p><i>Standard</i> <i>Performance rating of 3 for each criteria</i></p>	<p>20</p>
<ul style="list-style-type: none"> <li>• demonstrate basic competencies.</li> </ul>	<ul style="list-style-type: none"> <li>• observations of individual effort and interpersonal interaction during the learning process</li> </ul> <p><i>Assessment Tool</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>Integrated throughout</p>

**COURSE COM3210: DIGITAL IMAGING 3 (continued)**

Concept	Specific Outcomes	Notes
<p>Process and Procedures</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> <li>• frame and crop images for composition by demonstrating:               <ul style="list-style-type: none"> <li>– focal point; i.e., emphasis</li> <li>– an appropriate format; i.e., horizontal or vertical</li> <li>– awareness of background</li> <li>– clear focus, using either manual or automatic focus features</li> <li>– composition control; e.g., the “rule of thirds”</li> <li>– aesthetic awareness</li> </ul> </li> <li>• acquire a number of digital images relevant to the project to use as a starting point for digital manipulation and project completion</li> <li>• create, or acquire, and export digital images from two or more sources, other than a digital camera, to a specified directory for specific purposes; sources may include:               <ul style="list-style-type: none"> <li>– a scanner</li> <li>– screen capture software</li> <li>– royalty-free stock images</li> <li>– three-dimensional rendering software</li> <li>– vector graphics software</li> <li>– animation software</li> </ul> </li> <li>• create, alter, delete and generally maintain a logical directory structure for saving work</li> <li>• apply a creative problem-solving approach to the projects</li> <li>• work to deadlines to complete a number of simulated or real work world graphic communication projects</li> <li>• create a presentation for displaying finished images</li> <li>• present the display of finished images; provide text data on how each finished manipulated composition was created; answer questions and discuss solutions to problems that were encountered</li> </ul>	<p>Student work should demonstrate more advanced concepts of compositional control.</p> <p>Go to “Beginnings of Photographic Composition” at <a href="http://www.kodak.com">www.kodak.com</a> for guidelines on photographic composition; e.g., simplicity, rule of thirds, line, balance, framing, avoiding mergers.</p> <p>Students may choose to use a digital camera to acquire most of their images, but must also have access to the use of two or more other sources for acquiring or creating digital images.</p> <p>Text data that explains the steps used in generating the composition should accompany each finished image.</p>

**COURSE COM3210: DIGITAL IMAGING 3 (continued)**

Concept	Specific Outcomes	Notes
	<p><i>The student should:</i></p> <ul style="list-style-type: none"> <li>• explain the implications of copyright laws; e.g.:               <ul style="list-style-type: none"> <li>– scanned images and stock photographs must be used with permission</li> <li>– persons having copyright must sign legal waivers to permit use of their images by others</li> </ul> </li> <li>• demonstrate ethical behaviours by working within school and community standards.</li> </ul>	
<p>Applied Technologies</p>	<ul style="list-style-type: none"> <li>• demonstrate the use of two or more of the following as a creative source for generating or acquiring images, textures, backgrounds and specific portions of images:               <ul style="list-style-type: none"> <li>– digital camera</li> <li>– scanner</li> <li>– screen capture software</li> <li>– stock photographs; e.g., from the Internet or CD-ROM</li> <li>– animation software</li> <li>– three-dimensional rendering software</li> <li>– vector graphics or hybrid vector/raster software</li> <li>– other software as dictated by lab facilities</li> </ul> </li> <li>• apply bitmap editing effects to create interesting and aesthetically appealing compositions. Bitmap editing should demonstrate the use of:               <ul style="list-style-type: none"> <li>– tool box functions and menu commands</li> <li>– filters, effects, plug-ins</li> <li>– composite imaging</li> </ul> </li> <li>• demonstrate ability to:               <ul style="list-style-type: none"> <li>– verbalize how different bitmap editing effects may contribute to a composition</li> <li>– hypothesize how a digital composition may have been created</li> </ul> </li> <li>• identify and describe common file formats, with reference to:               <ul style="list-style-type: none"> <li>– advantages and disadvantages</li> <li>– problems and solutions</li> <li>– compression issues</li> <li>– export methods</li> <li>– issues surrounding multiple file formats</li> </ul> </li> </ul>	<p>Software available in the lab will dictate which image sources can be used.</p> <p>Megapixel.net is a monthly digital camera web magazine available at <a href="http://www.megapixel.net">http://www.megapixel.net</a></p> <p>Students may wish to use:</p> <ul style="list-style-type: none"> <li>• JPG (Joint Photographers Expert Group)</li> <li>• GIF (Graphics Interchange File Format)</li> <li>• TIF (Tagged Image File Format)</li> <li>• CDR (CorelDRAW! Vector Graphic)</li> <li>• PSD (PhotoShop Bitmap File)</li> <li>• CPT (Corel Photo-Paint Bitmap File)</li> <li>• EMF (Enhanced Metafile)</li> </ul>

**COURSE COM3210: DIGITAL IMAGING 3 (continued)**

Concept	Specific Outcomes	Notes
	<p><i>The student should:</i></p> <ul style="list-style-type: none"> <li>• apply advanced digital camera functions, commands and effects, based on camera features available for a specific purpose</li> <li>• select, in a self-directed manner, advanced bitmap editing functions and commands that are appropriate to the task</li> <li>• demonstrate effective use of a CD-ROM writer and colour printer in preparing a portfolio suitable for presentation for entry-level employment or post-secondary study.</li> </ul>	<ul style="list-style-type: none"> <li>• WMF (Windows Metafile)</li> <li>• PIC (Lotus Picture File).</li> </ul> <p>Other file formats and compression schemes may be chosen as the need arises. Research applications of different file formats on the Internet.</p>
Presentation	<ul style="list-style-type: none"> <li>• present a series of 10 or more finished bitmap compositions to teacher and peers that illustrate thematic or stylistic unity</li> <li>• discuss the presented images in terms of:               <ul style="list-style-type: none"> <li>– problems and solutions</li> <li>– aesthetics</li> <li>– composition</li> <li>– copyright issues</li> <li>– bitmap effects</li> <li>– file import/export issues</li> <li>– compression/decompression issues</li> </ul> </li> <li>• generate text data for oral support during the presentation</li> <li>• create and present a portfolio of work completed in this course or add work completed to an existing portfolio; the portfolio should be written to CD-ROM/zip disk or saved to a hard drive.</li> </ul>	<p>Research post-secondary calendars and interview business/industry for ideas about how to create a useful portfolio.</p> <p>Potentially useful sources of information are available through the Internet at:</p> <ul style="list-style-type: none"> <li>• <a href="http://www.focalfix.com/">http://www.focalfix.com/</a></li> <li>• <a href="http://www.lonestar.digital.com/">http://www.lonestar.digital.com/</a></li> <li>• <a href="http://www.kodak.com/US/en/nav/digital/shtml">http://www.kodak.com/US/en/nav/digital/shtml</a></li> <li>• <a href="http://www.shortcourses.com/">http://www.shortcourses.com/</a></li> </ul> <p>Text data that describes how the images were created can be in the form of a handout, notes or text data on screen.</p>

