



## COURSE OUTLINE REVISED SPRING 2008

DMA 110

Digital Imaging I

3 Credits

Hours: 1 Lecture/ 4  
Lab

Pre-requisite: N/A

Implementation  
Spring 2008

**Catalog description (2006-2009 Catalog):**

Designed to meet the needs of artists and designers in diverse fields, involves the leading professional paint and photo retouching software. Addresses the practical and creative aspects of producing art and illustrations and manipulating photographs and other images through a series of hands-on assignments.

**Is course New, Revised, or Modified?** Revised

**Required texts/other materials:**

1. Required text:

Ben Willmore, Adobe Photoshop CS3 Studio Techniques ISBN: 0321510461

2. Digital files from the instructor's files.

3. Computer hardware and software.

**Revision date:** Fall 2007

**Course coordinator:** Ed Roney, tel. x 3458, e-mail: roneye@mccc.edu

**Information resources:**

Digital files from the instructor's files, handouts, computer hardware and software.

**Other learning resources:** N/A

## Course Competencies/Goals:

### *The student will be able to:*

1. Demonstrate the ability to effectively use the major tools and commands of Photoshop
2. Choose the right tools and settings within Photoshop to create imagery and files for graphic design, web design, and photography
3. Demonstrate the ability to apply the concepts of digital imaging such as resolution and digital color and be able to manipulate them effectively
4. Apply the skills of photo retouching, manipulation, and composition to achieve the desired results
5. Use Photoshop in conjunction with other programs and various file types both for getting elements into Photoshop as well as for use within other applications.
6. Discuss his/her work during a critique and critically evaluate and justify his/her own artistic and vocational practice

## Course-specific General Education Knowledge Goals and Core Skills.

### General Education Knowledge Goals

**Goal 4. Technology.** Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

**Goal 9. Ethical Reasoning and Action.** Students will understand ethical issues and situations.

### MCCC Core Skills

**Goal B. Critical Thinking and Problem-solving.** Students will use critical thinking and problem solving skills in analyzing information.

**Goal C. Ethical Decision-Making.** Students will recognize, analyze and assess ethical issues and situations.

**Goal E. Computer Literacy.** Students will use computers to access, analyze or present information, solve problems, and communicate with others.

## Units of study in detail.

### Unit I: Vector and Brush Artwork

#### *The student will be able to:*

- Demonstrate an understanding of the Photoshop User Interface. (**Course Competencies 1; Gen Ed Goal 4; MCCC Goal E**)
- Demonstrate ability to use the brush and drawing tools effectively for creating images. (**Course Competencies 1,2,4; Gen Ed Goal 4; MCCC Goal E**)
- Demonstrate ability to use the vector shape and line tools effectively for creating images. (**Course Competencies 1,2,4; Gen Ed Goal 4; MCCC Goal E**)
- Demonstrate ability to use the Type tool and options effectively for editing and formatting text. (**Course Competencies 1,2,4; Gen Ed Goal 4; MCCC Goal E**)
- Demonstrate ability to use Layers to manage image elements and order in an effective manner. (**Course Competencies 1,2,4; Gen Ed Goal 4; MCCC Goal E**)
- Demonstrate ability to conceptualize and articulate visually his/her idea in a two-dimensional composition. (**Course Competencies 2,4; Gen Ed Goal 4; MCCC Goal E**)
- Design using the following principles of two-dimensional design: Balance, Unity, and Emphasis. (**Course Competencies 2,4; Gen Ed Goal 4; MCCC Goal E**)
- Discuss his/her work during a critique and critically evaluate and justify his/her own artistic and vocational practice. (**Course Competencies 2; Gen Ed Goal 4; MCCC Goal B**)

## **Unit II: Photo Retouching and Restoration**

*The student will be able to...*

- Demonstrate ability to save files in Photoshop in different formats and understand the benefits and disadvantages of TIFF, JPEG, PSD, and RAW. **(Course Competencies 2,5,6; Gen Ed Goal 4; MCCC Goal B,E)**
- Demonstrate understanding of the benefits and disadvantages of Bitmap vs. Vector programs. **(Course Competencies 2,4,5; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate ability to manage files properly (network, hard drive, and external storage). **(Course Competencies 5; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate understanding of Image Size, File Size, Resolution, and the difference between PPI, LPI, and SPI. **(Course Competencies 1,3,5,6; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate ability to scan at the required Target Size and Resolution. **(Course Competencies 1,5,6; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate ability to retouch and restore photographs using the following tools: Rubber Stamp, History Brush, and Healing Brush. Compare and contrast these tools and know methods for controlling their features. **(Course Competencies 1,2,4; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate understanding of Megapixel calculation and Bit Depth. **(Course Competencies 3,5; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate understanding of Copyright and when parody and farce can be considered Fair Use of Copyrighted material. **(Course Competencies 1,2,4,5; Gen Ed Goal 9; MCCC Goal C)**
- Discuss his/her work during a critique and critically evaluate and justify his/her own artistic and vocational practice. **(Course Competencies 2; Gen Ed Goal 4; MCCC Goal B)**

## **Unit III: Layers, Masks and Collage**

*The student will be able to...*

- Demonstrate ability to conceptualize and articulate visually his/her idea in a two-dimensional composition. **(Course Competencies 2,4; Gen Ed Goal 4; MCCC Goal E)**
- Design using the following principles of two-dimensional design: Balance, Unity, and Emphasis. **(Course Competencies 2,4; Gen Ed Goal 4; MCCC Goal E)**
- Distinguish between different types of Balance and different ways to achieve Unity and Emphasis. **(Course Competencies 2,4; Gen Ed Goal 4; MCCC Goal E)**
- Design effectively using Layers and Transformations. **(Course Competencies 1,2,4; Gen Ed Goal 4; MCCC Goal E)**
- Combine various tools and techniques to insert, efface, and substitute image elements. **(Course Competencies 1,2,4; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate ability to use basic Selection tools (Magic Wand, Lasso Tools, and Subtractions and Additions) and understanding of the benefits and disadvantages of each. **(Course Competencies 1,2,4; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate ability to use Layer Effects, Styles, Layer Masks, and Clipping Masks. **(Course Competencies 1,2,4; Gen Ed Goal 4; MCCC Goal E)**
- Discover and experiment with Filters. **(Course Competencies 1,2,4; Gen Ed Goal 4; MCCC Goal E)**
- Discuss his/her work during a critique and critically evaluate and justify his/her own artistic and vocational practice. **(Course Competencies 2; Gen Ed Goal 4; MCCC Goal B)**

#### **Unit IV: Color Correction**

*The student will be able to...*

- Demonstrate ability to use, compare, and contrast the following adjustment tools: Selective Color, Replace Color, Levels, Hue/Saturation, and Color Range. **(Course Competencies 1,3,4; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate ability to use Curves as an adjustment tool for Color Correction and Tonal Values adjustment and understand the benefits of Curves vs. other adjustment tools. **(Course Competencies 1,3,4; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate understanding of Color Theory (RGB-additive vs. CMYK-subtractive) and of the RGB-to-CMYK conversion. **(Course Competencies 1,3,4; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate ability to use Adjustment Layers and how to limit their effects via Masks and Layer Grouping. **(Course Competencies 1,3,4; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate ability to sharpen images with Unsharpmask. **(Course Competencies 1,3,4; Gen Ed Goal 4; MCCC Goal E)**
- Discuss his/her work during a critique and critically evaluate and justify his/her own artistic and vocational practice. **(Course Competencies 2; Gen Ed Goal 4; MCCC Goal B)**

#### **Unit V: Advanced Compositing**

*The student will be able to...*

- Demonstrate ability to conceptualize and articulate visually the idea of the truth and constructed reality in a two-dimensional composition. **(Course Competencies 2,4; Gen Ed Goal 4; MCCC Goal B,E)**
- Demonstrate an understanding of Surrealist ideas and why imaginary or combined imagery is or is not Surrealistic. **(Course Competencies 2,4; Gen Ed Goal 4; MCCC Goal B, E)**
- Design using the following principles of two-dimensional design: Balance, Unity, and Emphasis. **(Course Competencies 2; Gen Ed Goal 4; MCCC Goal B, E)**
- Discover and experiment with devices to show depth. **(Course Competencies 1,2,3,4; Gen Ed Goal 4; MCCC Goal B, E)**
- Demonstrate ability to use advanced selection techniques, Channels/Masks, and Quick Mask mode. **(Course Competencies 1,2,3,4; Gen Ed Goal 4; MCCC Goal E)**
- Demonstrate ability to use Paths as an advanced selection method. **(Course Competencies 1,2,4; Gen Ed Goal 4; MCCC Goal E)**
- Discuss his/her work during a critique and critically evaluate and justify his/her own artistic and vocational practice. **(Course Competencies 2; Gen Ed Goal 4; MCCC Goal B)**

#### **Evaluation of student learning:**

Instructional modes to be used are: Integrated lecture and laboratory, studio assignments with specifications and limitations set by the instructor, demonstrations by the instructor, and discussions and critiques of student work.

The student is responsible for his or her regular attendance, participation in classroom discussions and critiques of student work, and for including his or her work to be discussed and evaluated. Diligent work on assignments is essential.

Evaluation of progress and grades are determined by the instructor, based upon the following considerations: attendance, participation, and estimate of quality of class work and homework assignments (by instructor).

Values of quality, aesthetics, etc., are based upon the instructor's judgment of the work produced, the effort employed, and the total result achieved. To receive full credit, all assignments are due on time. A late assignment will be accepted one class period after due date with a reduced letter grade. After one missed class period, late assignments will receive the grade of "F".

The grade of "A" will be earned by students who demonstrate mastery of the essential elements of the material presented, as well as demonstrating excellence in aesthetics

and originality in completing course objectives with at least 90% accuracy.

The grade of “B” will be earned by students who demonstrate more than adequate mastery of the essential elements of the material presented and acceptable knowledge of the course content. Achievement will be demonstrated when all of the specific course objectives are fulfilled with at least 80% accuracy.

The grade of “C” will be earned by students who demonstrate adequate mastery of the essential elements of the material presented. Achievement will be demonstrated when all of the specific course objectives are fulfilled with at least 70% accuracy.

The grade of “D” is undesirable, but indicates a minimum passing of the course requirements. All of the course objectives must be fulfilled with at least 60% accuracy.

The grade of “F” will be earned by students who do not demonstrate achievement.

<b>Grade Breakdown</b>	<b>Percent Overall Grade</b>
Class Attendance and Participation	10%
Quiz: File Types, Resolutions, Terminology	15%
Project 1: Vector and Brush Artwork	15%
Project 2: Photo Retouching and Restoration	15%
Project 3: Layers, Masks, Collage	15%
Project 4: Color Correction	15%
Project 5: Advanced Compositing	15%

**Academic Integrity Statement:**

Students are expected to comply with the college-wide requirements for academic integrity. Mercer County Community College is committed to Academic Integrity—the honest, fair, and continuing pursuit of knowledge, free from fraud or deception. This implies that students are expected to be responsible for their own work. Presenting another individual’s work as one’s own and receiving excessive help from another individual will qualify as a violation of Academic Integrity. The entire policy on Academic Integrity is located in the Student handbook and is found on the college website ([http://www.mccc.edu/admissions\\_policies\\_integrity.shtml](http://www.mccc.edu/admissions_policies_integrity.shtml)).

**Any student who has special needs because of a disability is entitled to receive accommodations.**

Eligible students at Mercer County Community College are assured services under the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973.

If you believe you are eligible for services, please contact Arlene Stinson, the Director of Academic Support Services. Ms. Stinson’s office is LB221, and she can be reached at (609) 570-3525.

On the James Kerney Campus, contact Assistant Dean Donald Jones in KC216 or at (609) 570-3147.