

**EDISON COMMUNITY COLLEGE
NET 105 COMPUTER GRAPHICS
3 CREDIT HOURS**

Fall 2009

Gary Scott Jones, Instructor

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Office hours by appointment

COURSE DESCRIPTION:

Basic creation and manipulation of computer-generated images using painting and drawing software. Topics include: bitmapped graphics, vector (object-oriented) graphics, computer painting and drawing techniques, special effects, scanning techniques, resolution and sampling, image editing, file compression and file formats. Prerequisite: CIT 100S or department permission.

COURSE GOALS:

Upon completion of this course the student should be able to:

1. Understand the differences between bitmapped and vector images.
2. Understand and demonstrate scanning, resolution and resizing techniques.
3. Design and create computer-generated images.
4. Manipulate and/or color-correct all or part of an image.
5. Save and convert images from one file format to another.
6. Print final images to output device.

TOPIC OUTLINE:

1. Bitmapped Versus Vector Images
2. Using Painting Software (Adobe Photoshop) to Create an Image
3. Using Drawing Software (Macromedia Freehand) to Create an Image
4. Scanning Techniques, Resolution, and Resizing
5. Image Manipulation
6. File Compatibility
7. Importing and Exporting Text and Graphic Files
8. Creating Bitmapped and Vector Animations for the World Wide Web

Texts and Manuals

Adobe Photoshop CS3 How-Tos; 100 Essential Techniques, Chris Orwig, Peachpit, 2008.

Part II

Statement of Intent

Upon successful completion of this course, the student should possess basic skills and confidence to pursue the concepts and processes of computer graphics, and to make effective decisions for practical applications of computer graphics technology.

Each student is responsible for maintaining backup files of his or her work.

Philosophy

With all of the work we do in class there are some fundamental ideas that we must consider:

- a. The computer is a tool. It is not, and must never be, the end all to be all of design.
- b. Target Audience
- c. Limit yourself not by what you know, but rather by what you can imagine, and never limit your imagination.
- d. "Keep it simple. Less is more."
- e. Balance between Creativity and Function. Meeting deadlines while creating "Cool" Art
- f. Uniqueness and Effectiveness. What sets your work apart from every other designer?
- g. The 'Maybe Rule': if it maybe works, it does not work

Grading

Grades are based on a 4.0 scale:

- 4.0 = A (90-100% of points available)
- 3.0 = B (80-89% of points available)
- 2.0 = C (70-79% of points available)
- 1.0 = D (60-69% of points available)
- 0.0 = F (less than 60% of points available)

Coursework will be graded for accuracy and completeness. Final grades will be determined by the accumulation of grades for each assignment during the term. Extra work may be allowed for extra credit, at the discretion of the instructor. The instructor reserves the right to raise or lower the final grade based on the student's in-class participation, attendance, or other circumstances.

PLEASE NOTE: Proper spelling, grammar and punctuation will be expected. The instructor reserves the right to refuse acceptance of any written assignment with five or more grammatical or mechanical errors.

Attendance Policy

Participation in each class is required. Our class discussions are one of the most vital elements of this course. I will be deducting points from students who are not active participants in our daily activities. Attendance of all classes is Mandatory. There are no

"excused absences". Every absence must be made up by either completing the in-class work, whenever applicable, or completing make up assignments given at the Instructor's discretion.

Each absence that is not made up will lower the final grade by 6%. Please refer to the following link for any attendance questions:

<http://www.edisonohio.edu/handbook/studenthandbook.pdf>

Accessibility

Any student who may need assistance due to a disability should contact Disability Support Services.

Cell Phone Policy

Cellular phones are not be used during class time. If an emergency call must be taken, politely remove yourself from class and inform me if you need to be dismissed from class for the day. It is your responsibility to find out what materials you missed. Use of cell phones in class will result in a final grade reduction of 3%.

Laptop Computer Policy

Laptops will rarely be used during class. All notes are expected to be taken on paper. Laptops may be allowed during group sessions upon approval. The use of social networking sites (Facebook, MySpace, Twitter, Flickr, etc.) during class time is strictly prohibited and will result in a final grade reduction of 3%.

Plagiarism Policy

Any instance of plagiarism will result in a 0% credit for the corresponding assignment.

Works Cited Guidelines

Wikipedia is not an acceptable source of information.

All facts and quotes must be supported by a source in the works cited page of the assignment.

Groups

Groups will be chosen in class. If difficulties arise due to lack of participation from a member of your group please communicate with me so that conflicts can be resolved without a penalty to the grades of those who are working together.

Remember that someone is paying for your experience here in one way or another. Please don't waste your time or resources.

In-Class Assignments

The list of assignments below is subject to change. Submitted assignments must follow this format: Gary Jones_Assignment Name_Date Completed

Assignments will be posted online.

I. Motivational Poster

- a. I will provide a photograph on Blackboard
- b. In-class Tutorial
 - i. Cropping and Resizing a picture
 - ii. Resizing Canvas with Crop Tool
 - iii. Adding Text
 - iv. Adding Bullet Points
 - v. Understanding Special Characters/Alt-commands (online search)

II. Working with Layer Blending Options

- a. I will provide a sample Photoshop Document on Blackboard
- b. In-class Tutorial
- c. In-class Experimentation
- d. Trial and Error Period

III. Understanding Blending Modes

- a. In-class Discussion
 - i. Create a blank Photoshop document 1000px X 1000px.
 - ii. Use the following tools:
 1. Paint Brush
 2. Eraser
 3. Dodge
 4. Burn
 5. Sponge – Soaks away color
 6. Smudge
- b. Trial and Error Period

IV. Introduction to Masking

- a. I will provide an image on Blackboard
- b. In-class Tutorial
 - i. Adding a layer mask
 - ii. Editing to a layer mask
- c. “Graffiti Kids”
 - i. In-class tutorial

V. Cloning Stuff

- a. I will provide an image on Blackboard
- b. In-class tutorial
 - i. Copying entire layers
 - ii. Understanding the benefits and risks of the following tools:
 - 1. Eraser
 - 2. Lasso
 - 3. Magic Wand/Quick Selection Tool
 - 4. Clone stamp

VI. Using Screens to Blend Layers

- a. I will provide an image on Blackboard
- b. In-Class Tutorial
- c. Question and Answer Period

VII. Skyline - Cool Layer Stuff

- a. I will provide a sample Photoshop file on Blackboard
- b. In-class tutorial
- c. Question and answer period
- d. Trial and error period

Major Projects

I. Introduction to Photo Correction

- a. I will provide 3 photos on Blackboard
- b. In-class tutorial and Questions-and-Answer Period
- c. Homework-Correction of 3 images

II. Self Portrait

- a. Provide your own quality self photograph in digital format
- b. Use Photoshop to paint the image
- c. Critique session
- d. Present in electronic and printed format

III. Film Poster

- a. Create a poster for a film that is not yet in theaters

IV. Video Game packaging

- a. Use all of your design skills to create a box for an upcoming hit video game.
- b. Discussion session
- c. Trial and error period
- d. 3 Draft stages(1. online 2. in class 3 Final in class):
 - i. Trial and error period
 - ii. Critique session
- e. Final Critique
- f. Present in electronic and printed format