Modesto Junior College
Course Outline of Record

CMPGR 213

I. **OVERVIEW**
The following information will appear in the 2009 - 2010 catalog

**CMPGR 213**  
**Applied Computer Graphics**  
3 Units

**Also offered as:** ART - 103: Applied Computer Graphics

**Recommended for Success:** Before enrolling in this course, students are strongly advised to be able to demonstrate basic computer skills such as creating and navigating folders and files.

Concepts and techniques in computer graphics as related to fine and applied art applications.

Three maximum completions.

Field trips might be required.  (A-F or P/NP - Student choice) Lecture /Lab

**Transfer:** (CSU)

II. **LEARNING CONTEXT**
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

   A. Using the Software Interface  
   1. Navigation and utility tools  
   2. Palettes  
   3. Selection, adjuster and shape tools  
   4. Libraries and movers  
   5. Customizing the interface  

   B. Basics of Painting Techniques  
   1. Choosing and customizing brushes and variants  
   2. Choosing colors and paper textures  
   3. Using expandable plug-in brushes  
   4. Painting on transparent floaters  
   5. Painting on layers  

   C. Cloning and Art Materials  
   1. Cloning a document using tracing paper  
   2. Painting with auto clone  
   3. Using advanced cloning techniques (cloning brush, warped cloning)  

   D. Selections, Masks, and Floaters  
   1. Understanding selection and masks  
   2. Converting selection to shapes  
   3. Stoking selection with brush  
   4. Creating masks  
   5. Working with and editing image floaters  
   6. Working with and creating reference floaters  

   E. Utilizing Plug-Ins and Image Effects  
   1. Adjusting or altering the image  
   2. Understanding different image effects  

   F. Understanding Vectors  

   G. Printing Techniques for Portfolio  
   1. Using the print dialogue  
   2. Color management system  
   3. Saving an EPS for printing  

   H. Understanding Painting on the Net  
   1. Technical requirements
2. Crossing a firewall
3. Net painting sessions
4. Using the chat window
5. Net painting collaborations

Second and third completions of this course will enhance student skills by allowing them to repeat and expand on assigned projects using current versions of industry-standard software. As software is periodically updated, major changes in functions, features and interface occur.

2. Required Lab Content:

A. Utilization of the Software Interface
   1. Navigation and utility tools
   2. Palettes
   3. Selection, adjuster and shape tools
   4. Libraries and movers
   5. Customizing the interface
B. Demonstration of the Basics of Painting Techniques
   1. Choosing and customizing brushes and variants
   2. Choosing colors and paper textures
   3. Using expandable plug-in brushes
   4. Painting on transparent floaters
   5. Painting on layers
C. Cloning and Art Materials
   1. Cloning a document using tracing paper
   2. Painting with auto clone
   3. Using advanced cloning techniques (cloning brush, warped cloning)
D. Demonstration of Selections, Masks, and Floaters
   1. Understanding selection and masks
   2. Converting selection to shapes
   3. Stoking selection with brush
   4. Creating masks
   5. Working with and editing image floaters
   6. Working with and creating reference floaters
E. Utilization of Plug-Ins and Image Effects
   1. Adjusting or altering the image
   2. Understanding different image effects
F. Demonstration of Vectors
G. Printing Techniques for Portfolio
   1. Using the print dialogue
   2. Color management system
   3. Saving an EPS for printing
H. Utilization of Painting on the Net
   1. Technical requirements
   &nbsp; 2. Crossing a firewall
   3. Net painting sessions
   4. Using the chat window
   5. Net painting collaborations

B. ENROLLMENT RESTRICTIONS

1. Advisories

Before enrolling in this course, students are strongly advised to be able to demonstrate basic computer skills such as creating and navigating folders and files.

C. HOURS AND UNITS

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D. METHODS OF INSTRUCTION (TYPICAL)

Instructors of the course might conduct the course using the following method:

1. Lectures, demonstration and discussion
2. Guest presentations
3. Assist students with hands-on assignments and projects
4. Professional examples on video

E. ASSIGNMENTS (TYPICAL)

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**
   
   *Time spent on coursework in addition to hours of instruction (lecture hours)*
   
   1. Weekly graded projects based upon lectures, demonstrations and course material.
   2. Practical final project demonstrating facility with the software and with concepts presented in the course.

2. **EVIDENCE OF CRITICAL THINKING**
   
   *Assignments require the appropriate level of critical thinking*
   
   Symbol Design project
   
   Concept:
   Symbols should capture the essence of an object and be direct in their visual message. The development of a symbol requires a designer to say the most with the least. Symbols are without type. They are used to identify a corporation, agency or institution. They are unique, simple, have quick impact and often utilize figure/ground.
   
   Objectives:
   1) Learn to simplify an idea or image.
   2) To utilize and understand Gestalt principles. Understanding the figure/ground relationship is essential in designing effective symbols—especially negative spaces.
   3) Value of good reference material and how time-consuming it can be to do the research.

   Figure/Ground project
   
   Concept:
   Figure/Ground is the most powerful Gestalt principle as it is the fundamental law of perception. It gives us the ability to read. With every mark that is drawn, the student begins to realize the importance of the negative space that has just been created. Does it add or detract from the design? This project focuses on drawing only the negative space to create a visually intriguing solution. This means that the image will be white, the background will be black. Concentrating effort in this way should demonstrate to the student what a powerful tool that the successful use of figure/ground can be.

F. **TEXTS AND OTHER READINGS (TYPICAL)**

III. **DESIRED LEARNING**

A. **COURSE GOAL**
   As a result of satisfactory completion of this course, the student should be prepared to:

   utilize vector and raster software to produce digital art and illustrations.

B. **STUDENT LEARNING GOALS**
   Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. **Required Learning Goals**
   Upon satisfactory completion of this course, the student will be able to:

   a. Demonstrate how to use a Graphical User Interface.
   
   b. Demonstrate digital painting and illustration techniques.
   
   c. Illustrate the use of paths and layers.
   
   d. Employ the use of plug-ins and image effects.
   
   e. Prepare portfolio for printing.

2. **Lab Learning Goals**
   Upon satisfactory completion of the lab portion of this course, the student will be able to:

   a. Demonstrate how to use a Graphical User Interface.
   
   b. Demonstrate digital painting and illustration techniques.
   
   c. Illustrate the use of paths and layers.
   
   d. SECOND COMPLETION:
   
   e. demonstrate updated skills reflecting current industry standards as software tools, interface and functions evolve in new versions.
   
   f. THIRD COMPLETION:
   
   g. demonstrate updated skills reflecting current industry standards as software tools, interface and functions evolve in new versions.

IV. **METHODS OF ASSESSMENT (TYPICAL)**

A. **FORMATIVE ASSESSMENT**

   1. Weekly critiques of digital images and projects.
   
   2. Periodic review of student's cumulative work.
   
   
   4. Periodic tests throughout the semester.

B. **SUMMATIVE ASSESSMENT**

   1. Practical final project.
   
   2. Written final exam.