HOUSATONIC
COMMUNITY COLLEGE

Course Name: **Introduction To Computer Graphics**

Course Number: **GRA* 111**

Credits: **3 Credits**

CATALOG DESCRIPTION: An introduction to computer graphics using Macintosh computers and professional software. Students learn the basic skills necessary to use the computer as a problem solving tool in the graphics environment. They acquire essential computer skills such as organizing digital files, proper scanning techniques and an overview of the Mac Operating System. This course introduces them to software programs that include Photoshop, Illustrator, and InDesign. Students will utilize the tools necessary for creating images ranging from abstract compositions to complex layouts that integrate color, images and text.

PREREQUISITE OR PARALLEL: ENG* 101

COURSE OBJECTIVES:
General Education Competencies Satisfied:

HCC General Education Requirement Designated Competency Attribute Code(s):

None

Additional CSCU General Education Requirements for CSCU Transfer Degree Programs:

None

Embedded Competency(ies):

CONX	**Continuing Learning & Information Literacy (Outcomes ☒ 1 ☒ 2 ☒ 3 ☒4)**
ED	**Appreciation of the Ethical Dimensions of Humankind (Outcomes ☒ 1 ☒ 2 ☒ 3 ☒4)**

Discipline-Specific Attribute Code(s):

☒ **C**	**Computer Literacy (satisfies requirement)**
☒ **FINA**	**Fine Arts elective**

Course objectives:
General Education Goals and Outcomes:
Embedded Continuing Learning & Information Literacy: Students will be able to use traditional and digital technology to access, evaluate, and apply information to the needs or questions confronting them throughout their academic, professional, and personal lives.

1. ☒ Demonstrate competency in using current, relevant technologies to solve problems, complete projects, and make informed decisions.

2. ☒ Access, navigate, identify and evaluate information that is appropriate for their need(s) and audience(s).
3. ☒ Synthesize information to broaden the knowledge base and produce both independent and collaborative work.
4. ☒ Evaluate the economic, legal, ethical, and social issues surrounding the access and use of information and relevant technologies.

Embedded Appreciation of the Ethical Dimensions of Humankind: Students will identify ethical principles that guide individual and collective actions and apply those principles to the analysis of contemporary social and political problems.
1. ☒ Respond critically to ethical issues.
2. ☒ Apply appropriate concepts and terminology in identifying ethical problems, proposing and defending solutions to them.
3. ☒ Apply standards and practices of scholarship, research, and documentation to defend positions and beliefs, including reevaluating beliefs in light of unforeseen implications or new evidence.
4. ☒ Recognize the value of creative, collaborative, and innovative approaches to problem-solving, including the ability to acknowledge differing points of view.

COURSE SPECIFIC OUTCOMES:
1. Demonstrate competence in the use of basic professional software for illustration, image modification, and page layout.
2. Demonstrate the process of visual thinking that leads to productive problem solving.
3. Recognize the aesthetic and expressive qualities of computer based graphic design.
4. Develop a basic understanding of the Macintosh computer and learn some of the tools that are commonly used in graphic design software programs.
5. Create a variety of publications that will enhance the students' ability to use the computer as a design tool.
6. Investigate and articulate ethical choices when communicating through the visual medium.

COURSE CONTENT: In this course students establish a good working knowledge of the Macintosh and begin to understand how to use the computers as a graphics tool. Students will learn how easy it is to create and edit digital images as well as produce interesting page layouts.
Topics:

Understanding the Mac:
1. Hard Drive
2. Operating System
3. Desktop
4. Applications
5. Files
6. Memory
7. Storage

8. The Server

Hardware:
    I. The Macintosh Computer
    2. Speed and Ram
    3. Storage Media
    4. Monitors
    5. Printers
    6. Scanners

Software:
    1. Choosing Software
    2. Digital Page Design
    3. Digital Illustration
    4. Image Editing
    5. Word Processing
    6. Email Communication
    7. Spreadsheets

Typography:
    1. Type Measurement
    2. Type Characteristics
    3. Fonts

Prepress Production:
    1. File Formats
    2. Resolution
    3. Printing and Proofing
    4. Saving File properly

Adobe Bridge:
    1. Navigating
    2. Using Folders
    3. Metadata
    4. Keywords
    5. Using the Bridge for Presentations

Adobe Illustrator:
    1. The Tools in Illustrator
    2. The Pen Tool
    3. Fill and Stroke
    4. Layers
    5. Transparency
    6. Color

Adobe Photoshop:
1. Tools in Photoshop
2. RGB and CMYK
3. Layers
4. Channels
5. File Formats
6. Resizing Images
7. Text in Photoshop
8. Photo Editing
9. Color Adjustments
10. Resolution

In Design:
1. Tools in InDesign
2. Saving Files
3. Placing Images
4. Text Flow
5. Text Wrap
6. Creating Columns
7. Concepts in Effective Page Layout
8. Multiple Page Presentation

Preparing Files for Print
1. Preparing files properly when working with a Service Bureau
2. Choosing the Right Printer