

COURSE COM2045: VECTOR GRAPHICS 1

Level: Intermediate

Prerequisite: COM1035: Graphics Tools

Description: Vector graphics are commonly used in graphic design, page layout, typography, logos, sharp-edged artistic illustrations, technical illustrations, diagramming and flowcharting. In this course, students use vector editing software to create basic vector graphics.

Parameters: Access to a computer, electronic storage equipment, graphic creation/manipulation software and image-capture devices.

Outcomes: The student will:

1. create vector images using graphic applications

- 1.1 set up a document, considering:
 - 1.1.1 printed area; e.g., single or multipage documents, artboards
 - 1.1.2 document profile; e.g., print, Web, mobile devices, video and film, basic cyan-magenta-yellow-key black (CMYK) colour model, basic red-green-blue (RGB) colour model
 - 1.1.3 colour spaces
- 1.2 draw and transform objects by:
 - 1.2.1 creating and modifying a vector object using a pen tool and bezier controls
 - 1.2.2 adjusting stroke settings
 - 1.2.3 cutting, erasing or deleting portions of an object by using the appropriate tool(s)
 - 1.2.4 editing objects, groups, symbols and more layers
 - 1.2.5 creating a mask to hide parts of objects
 - 1.2.6 using open and closed paths, compound paths and compound shapes
 - 1.2.7 selecting one or more objects and arranging their stacking order
 - 1.2.8 modifying an object with one or more transformation tools
- 1.3 manage colour and transparency by:
 - 1.3.1 setting up colour management settings and proofing colour onscreen
 - 1.3.2 creating or loading colour swatches
 - 1.3.3 applying transparency options to objects
- 1.4 use type by:
 - 1.4.1 creating text objects
 - 1.4.2 formatting type by using character and paragraph attributes
 - 1.4.3 creating and applying character and paragraph styles to text
 - 1.4.4 using special characters
- 1.5 control effects, appearance and styles by:
 - 1.5.1 adjusting the appearance of objects
 - 1.5.2 saving and applying graphic styles
- 1.6 build objects by:
 - 1.6.1 creating and formatting a graph
 - 1.6.2 using and controlling gradient match
 - 1.6.3 using and adjusting the settings for blend tool
 - 1.6.4 choosing and/or creating the appropriate brush

- 1.7 import images into the document
- 1.8 prepare for electronic output by:
 - 1.8.1 creating output for the Web and/or mobile devices using proper settings
 - 1.8.2 choosing the correct over-printing options
 - 1.8.3 previewing and analyzing colour separations
- 1.9 prepare for print output
- 2. identify copyright restrictions and permissions and put them into practice**
- 3. present a selection of work completed in this course to an audience**
 - 3.1 discuss work regarding:
 - 3.1.1 how the elements and principles of design help facilitate good composition in his or her work
 - 3.1.2 the technical and creative aspects of the work; e.g., quality, uniqueness
 - 3.1.3 areas of concern/difficulty (if applicable)
 - 3.1.4 meeting school and community standards; e.g., appropriate language
 - 3.1.5 the use of tools and equipment
 - 3.2 participate in peer/teacher assessment
 - 3.3 add the selected work to a portfolio
- 4. apply consistent and appropriate work station routines**
 - 4.1 demonstrate good health and safety practices; e.g., posture, positioning of hardware and furniture
 - 4.2 demonstrate security for hardware, software, supplies and personal work
- 5. demonstrate basic competencies**
 - 5.1 demonstrate fundamental skills to:
 - 5.1.1 communicate
 - 5.1.2 manage information
 - 5.1.3 use numbers
 - 5.1.4 think and solve problems
 - 5.2 demonstrate personal management skills to:
 - 5.2.1 demonstrate positive attitudes and behaviours
 - 5.2.2 be responsible
 - 5.2.3 be adaptable
 - 5.2.4 learn continuously
 - 5.2.5 work safely
 - 5.3 demonstrate teamwork skills to:
 - 5.3.1 work with others
 - 5.3.2 participate in projects and tasks
- 6. identify possible life roles related to the skills and content of this cluster**
 - 6.1 recognize and then analyze the opportunities and barriers in the immediate environment
 - 6.2 identify potential resources to minimize barriers and maximize opportunities