

## **COURSE COM2035: RASTER GRAPHICS 1**

**Level:** Intermediate

**Prerequisite:** COM1035: Graphics Tools

**Description:** A raster format is commonly used in full colour images/graphics and photographs by using a data structure representing a generally rectangular grid of pixels or points of colour. In this course, students are introduced to the fundamental skills of raster graphics and their application.

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

**Outcomes:** The student will:

### **1. create raster images using graphic applications**

- 1.1 set up a document, considering:
  - 1.1.1 size
  - 1.1.2 resolution
  - 1.1.3 colour mode
  - 1.1.4 background
- 1.2 organize and manage image files using correct file conventions by:
  - 1.2.1 considering aspects of file size
  - 1.2.2 explaining the benefits of different file formats
- 1.3 correct, paint and retouch images by:
  - 1.3.1 adjusting options and painting; e.g., brush types, pencil, blending
  - 1.3.2 using retouch tools appropriately given various situations
  - 1.3.3 creating and using gradients and patterns
  - 1.3.4 using filters
- 1.4 work with selections by:
  - 1.4.1 creating a selection using the appropriate selection tool
  - 1.4.2 saving and loading selections
  - 1.4.3 moving and transforming selections
- 1.5 create and use layers by:
  - 1.5.1 creating and arranging layers appropriately; e.g., using layer groups
  - 1.5.2 creating and using layer effects
  - 1.5.3 creating and using layer styles
- 1.6 work with masks by:
  - 1.6.1 explaining the use of masks
  - 1.6.2 using masks and painting tools to create and edit a layer mask
- 1.7 work with vector tools by:
  - 1.7.1 creating shape layers and paths using vector tools
- 1.8 automate tasks
- 1.9 manage colour by:
  - 1.9.1 describing the process and components of colour management; e.g., profiles, working spaces, rendering intents, settings
  - 1.9.2 describing the proper colour conversion given common situations; e.g., red-green-blue (RGB) colour model for Web and video, cyan-magenta-yellow-key black (CMYK) colour model for prepress

- 1.10 prepare image for output by:
  - 1.10.1 creating a proof
  - 1.10.2 discussing and using options in print dialog box
  - 1.10.3 creating a flattened CMYK image
  - 1.10.4 creating a layered RGB with layer comps
  - 1.10.5 creating a .pdf with vector layers
- 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