### **Computer Graphics 1 Overview**

Content Area: Course(s): Time Period: Length: Status: Engineering COMPUTER GRAPHICS I 90 Days Published

Cover

#### EAST BRUNSWICK PUBLIC SCHOOLS

East Brunswick New Jersey

#### **Superintendent of Schools**

Dr. Victor P. Valeski

#### **BOARD OF EDUCATION**

Todd Simmens, President

Vicki Becker, Vice President

Susanna Chiu

Robert Cancro

Liwu Hong

Laurie Lachs

Barbara Reiss

Chad Seyler

Meredith Shaw

Course Adoption: 4/21/1986

Curriculum Adoption: 4/21/1986

Date of Last Revision Adoption: 9/1/2017

#### **Course Description:**

This course is designed to give students an understanding of and practical application of Adobe InDesign, Adobe Photoshop techniques. Adobe InDesign is one of the most powerful layout programs for professional desktop publishers and graphic designers. This is the process of creating documents that look like a professionally designed and printed product, which includes inserting illustrations, graphics and line drawings for the text copy. Students will produce and will be assessed on many activities that include creating an original layout for a newsletter, catalogue, logos and brochures as well as designing and crafting effective promotional pieces, publications and digital art. In addition, students gain foundational knowledge of the processes behind commercial printing operations and scanning techniques as well.

#### **COURSE SCOPE AND SEQUENCE**

Other Pacing Guide References Proficiency (Summative) Assessments

## UNIT 1 INTRODUCTION TO MAC OSX

- Identify major work areas of the OS for ease of navigation
- Finder window, sidebar, dock, general docs

2 days

- Utilize key features of the OS for file organization using view choice and terminology
- Dock customization with applications and views
- East Brunswick's Acceptable Use Policy and its application to our classroom
- mmmm

#### UNIT 2 INTRODUCTION TO PHOTOSHOP

- Identify each tool within toolbar by name
- Utilize each tool within toolbar properly according to its function 2 days
- Uncover and select tools in "flyout" menus when appropriate
- Breakdown toolbar into major sections:

- OSX Review Worksheet – teacher developed
- Acceptable Use contract – teacher developed

- Photoshop Toolbar – teacher developed
- Toolbar quiz

- $\circ$  Selection
- Crop and Slice
- o Retouching
- Drawing and Type
- $\circ$  Assistance
- o Swatches
- $\circ$  Modes

## UNIT 3 CLONE STAMP & CREATING ACCCURATE SELECTION AREAS

- Copyright Removal TLA
  - o Clone stamp tool
  - Peer critique on completed files
- Coloring Desaturated Photographs TLA
  - o Polygon, magnetic lasso tools
  - $\circ$  Blend modes
- Invisible Man TLA
  - Combining clone stamp with accurate selection areas
  - Selection of appropriate images for TLA given activity criteria

6 days for Copyright TLA

8 days for Coloring Desaturated Photos. TLA

4 days for Invisible Man TLA

- Teacherdeveloped procedure handouts
- Individual projects
- Peer critique activity Copyright Removal TLA
- Practical test

# UNIT 4 WORKING WITH MULTIPLE LAYERS & ALTERNATE METHODS FOR CREATING SELECTIONS

- Postcard Text TLA
  - o Type Warp
  - o Renaming Layers
  - o Linking /Merging Multiple Layers

4 days for Postcard Text TLA

7 days for Clip Art TLA

- Teacherdeveloped procedure handouts
- Individual projects
- Practical test

- Loading Selections from Layers
- Re-coloring Clip Art TLA
  - Loading selections from Channels
  - o Creating custom Gradients

## UNIT 5 FILTER GALLERY

- Digital Sketch TLA
  - Create selections through Select > Color Range command
  - Utilize filter gallery to create unique and artistic appearance on individual selection areas
    10 days
  - Color appropriateness throughout image to maintain "antique feel"
  - o Peer critique on completed files
- mmmm

#### UNIT 6 TEXT EFFECTS IN PHOTOSHOP

- Sky and Clouds Text EffectTLA
  - Modify > Contract & Feather
- Perspective Shadow Text Effect TLA
  - $\circ\,$  Free Transform and Perspective
- Chrome Metal Text Effect TLA
  - o Defining Custom Patterns
- Turf Text Effect TLA
  - Rasterizing Type Layers

- Teacherdeveloped procedure handouts
- Individual projects
- Peer critique activity on Digital Sketch TLA
- Practical test
- Photoshop Quiz

- Teacherdeveloped procedure handouts
- Individual projects

9 days

• Practical test

- Fire Text Effect TLA
  - o Liquifying an Image

#### UNIT 7 IMAGE EFFECTS IN PHOTOSHOP

- Photographic Rectangles Image Effect TLA
  - Drag/Copy New Layer Shortcut
- Magnify Image Effect TLA
  - Copy and Paste Layer Styles
- Cube Mosaic Image Effect TLA
  - Applying Gradient Maps
- Liquid Motion Image Effect TLA
  - o Saving Selections
- Panorama Planet Image Effect TLA
  - Cropping Images
  - o Polar Coordinates

#### UNIT 8 WORKING WITH LAYER MASKS

- Photomontage Design TLA
  - Combine multiple images using layer masks
  - Modify blend modes to merge images upon a single texture

7 days

9 days

- Teacherdeveloped procedure handouts
- Individual projects
- Practical test

- Teacherdeveloped procedure handouts
- Individual projects
- Practical test

#### UNIT 9 INTRODUCTION TO INDESIGN

- Identify each tool within toolbar by name
- Utilize each tool within toolbar properly according to its function
- Uncover and select tools in "flyout" menus when appropriate
- Breakdown toolbar into major sections:
  - Selection
  - Working with Type
  - Drawing
  - o Viewing Modes
  - o Applying/Changing Color Fills
  - Applying/Changing Strokes
  - o Applying/Changing Gradients

#### UNIT 10 PAGE LAYOUT AND DESIGN

- Business Card Design TLA
  - o Tinted Text and Graphics
  - o Horizontal Scale
  - $\circ\,$  Rotated Text
  - o Full & Partial Bleed Images
  - Text Wraps
  - o Scanned Images
- Compact Disc Booklet (8 pg.) Design TLA
  - Combine designs from Photoshop into page layout in InDesign

 InDesign Toolbar – teacher developed

2 days

6 days for Business

Card TLA

12 days for CD

Booklet TLA

• Toolbar quiz

- Teacherdeveloped procedure handouts
- Individual projects
- Practical test
- Peer critique activity on CD Booklet TLA

#### CONTENT FOCUS AREA AND COURSE NAME

#### **Course Name: Computer Graphics 1**

Course Number	School Numbers		Grades(s)	Credits	Min. Per Week	Initial Elective/Required Course Adopted	
1316	59	S	10-12	2.5	210	E	4/21/86

#### **Textbooks and Other Resources**

#### **Standards**

9.3.12.AR-AV.1	Describe the history, terminology, occupations and value of audio, video and film technology.
9.3.12.AR-PRT.2	Demonstrate the production of various print, multimedia or digital media products.
9.3.12.AR-PRT.3	Perform finishing and distribution operations related to the printing process.
VPA.1.1.12.D.1	Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.
VPA.1.1.12.D.2	Translate literary, musical, theatrical, and dance compositions by using them as stimulus/inspiration for corresponding visual artworks.
VPA.1.1.12.D.CS2	Stimuli for the creation of artworks can come from many places, including other arts disciplines.
VPA.1.3.12.D.CS1	How individuals manipulate the elements of art and principles of design results in original portfolios that reflect choice and personal stylistic nuance.
VPA.1.3.12.D.CS2	Culturally and historically diverse art media, art mediums, techniques, and styles impact originality and interpretation of the artistic statement.

#### Grading and Evaluation Guidelines GRADING PROCEDURES

In terms of proficiency level the East Brunswick grades equate to:

- A Excellent Advanced Proficient
- B Good Above Average Proficient
- C Fair Proficient
- D Poor Minimally proficient
- F Failing Partially Proficient

#### **COURSE EVALUATION**

Each quarter students will be evaluated with tests and programming assignments using a total point basis to determine the quarter average. The semester/course average will be a weighted average of the 2 quarter averages (40% each) and a final exam (20%); in a full year course, each quarter is worth 20% of a student's final grade and each exam (midterm & final) is worth 10% of the student's final grade.

Course achievement will be evaluated based on the percent of all pupils who achieve the minimum level of proficiency (final average grade) in the course. Student achievement levels above minimum proficiency will also be reported. Final grades, and where relevant mid-term and final exams, will be analyzed by staff for the total cohort and for sub-groups of students to determine course areas requiring greater support or modification.)

#### **Other Details**

#### 05162 Graphic Design

Graphic Design courses emphasize design elements and principles in the purposeful arrangement of images and text to communicate a message. They focus on creating art products such as advertisements, product designs, and identity symbols. Graphic Design courses may investigate the computer's influence on and role in creating contemporary designs and provide a cultural and historical study of master design works of different periods and styles.