

Mission Valley Regional Occupation Program

Digital Imaging Course Syllabus

- Course Title: Digital Imaging
- Instructor: Eric Stampfli
- CBEDS Title: Arts, Media, and Entertainment
- Date of Revision: August 2023
- Course Length: Year-long two semesters. Five credits each semester, one hour per day

Course Description:

Manipulating and enhancing images is a required skillset for today's photographer and Designer. Adobe Photoshop is considered the industry standard for print, multimedia and web imaging. The first semester of this class acquaints the student with Photoshop's tool sets, techniques, capabilities and fundamental operations. Students will learn to make accurate selections, create digital composites, work with contrast and color control/correction and layers, while developing efficient, professional skills for the many applications of digital imaging. During the second semester students will build on the foundation laid during the first and explore the deeper implications and more complex creations and dive deep into Digital Design. Topics will include typography, page design and layout, and most importantly output. We will also explore system calibration and advanced color management. Students will be tasked with creating a large body of work aimed at demonstrating their ability to conceive and produce complex design concepts.

As an ROP (Regional Occupational Program) course, our examination of Digital Imaging will be centered on building a foundation of the technical and professional skills necessary to achieve success in the world of Digital Design and Digital Imaging. Through the creation of both artwork and end user design layouts, each student will gain the skills necessary to produce and employ their new found talents in the creation of commercial art and retouching.

*Please note: Photography is a UC A-G course. Photography is Eligible for college articulation credits.

Overall Student Objective:

- Students will learn to develop an artistic voice
- They will learn to communicate complex ideas through imagery alone
- Learn and apply fundamental to advanced skills and techniques with Photoshop
- Learn the basics of Digital Design and layout for print and web
- Perform accurate selections, color/tonal range correction and compositing techniques.
- Fundamental capabilities, options and principles relevant to digital imaging procedures.
- Digital color spaces, advanced scanning techniques, blending modes, and file formats.
- Proficiency at advanced retouching techniques, complex layer masking

- Work with typography and understand pre-flight basics and output

Expected SLO's:

Workplace Basic Skills

- Apply Skills Learned in Class
- Analyze information and make decisions
- Communication verbally and in writing
- Work Independently and as a team member
- Work reliably responsibly and ethically

Career Technical Skills

- Demonstrate occupational competencies
- Use appropriate technology
- Practice Occupational Safety Standards
- Demonstrate an awareness of how a business and industry functions

Job Employment Skills

- Develop a plan and career goals
- Demonstrate an ability to use what you've learned here in other fields

Grading policy:

Imaging assignments and projects	65%
Homework Quizzes and Class Work	25%
Participation and Work Ethic	10%

Classroom Materials:

- Writing tools
- 1 Inch Binder with Dividers
- 1 USB Jump Drive or external hard drive

Makeup Work/ Late Work: All assignments are due on the assigned due date. Late work will result in a 30% reduction in your final grade. See me if there are special circumstances preventing you from submitting work on time.

Extra Help: I will be available to answer questions and address any concerns you might have after class or by appointment. You can also reach me by email at: estampfli@mvrop.org I will respond within 24 hours during the school week. I will not be available during lunch, unless an appointment is scheduled with me in advance.

Special Certificates and/ or Certifications: Students who receive a "C" grade or better will receive a Digital Photography 1 Certificate of Completion.

Attendance Policy: Mission Valley ROP's mission is to prepare students for employment, and career preparation via post-secondary educational opportunities. Just as in business and industry, where employees are expected to show up on time every day, Mission Valley ROP students are expected to be on time for class every day.

Make-up: Assignments will be given for excused absences only, which include medical, legal or bereavement circumstances. Failure to complete make-up assignments will adversely affect your grade. If you are tardy or miss a Mission Valley ROP class multiple times, you will lose units of credit and your grade will be adversely affected. Be advised that credits are earned by attendance only and cannot be made up.

Any student receiving a first semester grade of D- or lower will be dropped from the class.

Students must arrive on time to class. Talking on a cell phone or having a personal conversation outside the class is unproductive and will be considered a tardy. Tardiness reduces instructional time and is disruptive to the classroom. Tardies may prevent the student from receiving a course certificate.

Classroom Rules and Student Responsibilities:

- Be on time and come prepared **– students must be in their seat when the bell rings and stay in seat unless dismissed for other activities
- Safety and responsibility – In this class you will be working with fragile as well as high voltage equipment, and you will be entrusted with more freedom than other classes. Any behavior that endangers others, school facilities and equipment can result in permanent removal from the class.
- Be respectful – Show respect to your peers and your teacher. This is a community of learners where respect is of utmost importance towards creating a safe learning environment.
- Cellular phones in class–School policy prohibits the use of cell phones in class. However, cell phones are allowed when authorized by teacher for educational use.
- Work together – Group work is a central feature of this course. Cooperation and team work is required to successfully complete certain assignments.
- Restroom breaks ** –Hall passes are required and are subject to teacher discretion.
- Food and drink – Because we work with electronics, food and drinks are prohibited your table. If you do bring food you should sit at one of the tables in back that do not have electronics on them.

- Note: All students are expected to be familiar with and follow all Mission San Jose High School rules and policies
- Cheating and Plagiarism Policy Mission Valley ROP is committed to preparing students for the workforce. This preparation includes technical skills as well as business ethics. Mission Valley ROP does not condone cheating. Any student caught cheating on an exam or copying work from other students will be given one warning and a failing grade on that assignment. Any subsequent incident will result in Failure of the class.

Instructional Units:

Unit 1:

- 1) Introductory Lesson
 - a) Introductions, course scope, objectives, procedures. Copyright and ethics issues. Photoshop: Interface, beginning tools, palettes, brushes, painting options, color mixing and blending modes.
 - b) Traditional art vs Digital Student debate, can an image created in computer have the same impact and passion a hand created one does? Should it be in a museum?
 - c) Chat GPT and Computer generated Artwork
 - d) Paper and Pencil design
 - e) Basic tools (continued). Navigation, resolution, bit depth, color spaces, gamuts, image modes, file formats, canvas size. Basic keyboard shortcuts.
 - f) Selections, introduction to the manual selection tools. The Magic Wand, Quick Selection Tool, and the Lasso Tool.

Outcomes:

- Students will familiarize themselves with the Photoshop interface
- Students will learn the basics of Bitmapped graphics
- Students will make basic selections and learn to colorize an image non-destructively

Unit 2:

- 1) Description

- a) Scanning, image size and resampling. Output devices and requirements. Setting preferences. Flip, rotate and transformation controls. Basic layer management.
- b) Creating and working with layers
- c) Smart Objects
- d) FX Layers
- e) Intro into Compositing
- f) Elements of art: Line shape/form Texture, Color, Space, Scale
- g) Color Theory
- h) Using the brush tool, create a stroke that represents a dancer's movement
- i) Specialty Brushes Finding and Loading

Outcomes:

- Students will learn the importance of working to size with source imagery
- Students will be introduced to the Image Size Dialog and learn its importance
- Students will learn to manipulate images using the Transformation Controls
- Students will make basic selections and learn to colorize an image non-destructively
- Students will be introduced to basic compositing and the use of layers

Unit 3:

- 1) Description
 - a) Tonal range adjustment controls: Using Levels and Curves.
 - b) Adjustment Layers, Auto Color, The Info Palette and the Histogram
 - c) Basic color adjustment controls: Levels, Curves, Color Balance, Hue/Saturation. Color cast and color correction techniques.
 - d) Layer Masking
 - e) Non-destructive Dodge & Burn
 - f) The elements of design

Outcomes:

- Students will learn how to read and use the Info Palette for understanding Color
- Students will be introduced to the tonal controls and learn to read a histogram
- Students will learn how to color correct an image and Color Grade for impact
- Students will be introduced to the elements of design

Unit 4:

- 1) Description
 - a) Alpha Channels

- b) Working with Quick Masks
- c) The New AI Selection Tools Select and Mask
- d) Alpha Channel Selections
- e) An introduction to page layout, Text Blocks and UX
- f) Students will create an online portfolio, (Wix) to showcase their work

Outcomes:

- Students will be introduced to Alpha Channels
- Students will learn when to use Quick Masks to refine a selection
- Students will learn some advanced Layer Masking Techniques
- Students will learn how to use the new and powerful AI features in Photoshop to make initial selections and then use the Select and Mask features to modify them.
- Students will learn the basics of page layout and user experience

Unit 5:

- 2) Description
 - a) Basic Retouching Clone Stamp
 - b) The Healing Brush
 - c) Spot Healing
 - d) Copying and Pasting Source Material
 - e) Painting vs Cloning or copying
 - f) Pre-flight Soft Proofing
 - g) Printing our assignments

Outcomes:

- Students will learn basic retouching
- Strategies for approaching complex retouching challenges
- Students will learn the importance of making a flawless image
- Students will also be introduced to pre-flight checks and Printing

Unit 6:

- 1) Description
 - a) Introduction to Typography
 - b) Using Type in Photoshop
 - c) page layout in Illustrator & In Design
 - d) Type Effects in Photoshop
 - e) Creating Clipping Masks with Type
 - e) Vector Shapes

Outcomes:

- Students will learn basics of typography
- Students will be introduced to setting type in Photoshop
- Students will learn how to control type using the Character Palette

Unit 8:

Introductory Lesson

- a) Advanced Retouching Techniques
- b) Pen Tool Selections
- c) Creating Complex Masks with Multiple Feathers
- d) Color Blending and Textures
- e) Frequency Separation

Outcomes:

- Students will learn not to rely on Filters to make an image
 - Students will learn how to process Raw Images and in turn use the Raw Filter
 - Students will look at the new Neural Filters for quick image edits
 - Students will learn how to incorporate multiple images into an overall theme
- With the use of color grading, mode conversions, colorization and presets

Unit 7:

1) Introductory Lesson

- a) Production Filters: Gaussian Blur, Noise, and Unsharp Mask
- b) Smart Filters and Filter Gallery
- c) Liquify
- d) Neural Filters
- e) Camera Raw Filters
- f) Raw Processing in PSD

Outcomes:

- Students will approach some real world advanced retouching tasks
- Students will learn how to combine multiple selections with different feathered edges
- Students will master the Pen Tool, the most powerful selection tool in Photoshop and Illustrator

Unit 9:

1) Introductory Lesson

- a) Using the Actions Palette
- b) Designing a Resume
- c) Creating Cover as well as Thank You letters
- d) Finalizing our web portfolio
- e) Batch Processing
- f) Timelines Cinemagraphs

Outcomes:

- Students will learn Automation
- Students will learn how to write complex actions
- Students will create a Resume and basic business correspondence

They will finalize their web portfolios

- Creating Cinemographs

Unit 10:

- 1) Introductory Lesson
 - a) File Info and Meta-Tags
 - b) Writing and Saving Metadata
 - c) Copyrighting Images
 - d) Export dialog
 - e) Web Optimizing
 - f) ICC Profiling Loading and Preview

Assignment: "The Final Portfolio" Students will spend the last Unit refining and printing their work for inclusion into a portfolio.

Outcomes:

- Students will learn some of the inner workings of Meta Tags
- Students will learn about Copyrighting their work
- Students will learn how to use the Export Dialog for controlling Image size
- Students will be introduced to third party ICC Profiles and how to use them