**ART 3352: Digital Imaging**

**Spring 2018**

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**Office Hours: Tues 10-11**

**Section Information: ART 3352, sec.001**

**Time & Place: FA Bldg., Rm. 368, T-TH 11-2**

**Course Content**: The main objective in this course is to prepare students to use digital imaging techniques to effectively communicate their ideas. Emphasis is on the use of the computer as a tool for personal expression.

**Course Outcome:**

1. The student will be able to identify and explain basic computer terminology.
2. The student will be able to use digital imaging tools used in the software Adobe Photoshop CS.
3. The student will be able to conduct online research using the Internet.
4. The student will be able to make high-resolution scans of 2 and 3 dimensional objects through digital imaging.
5. The student will develop concepts and strategies for expressing their ideas through digital imaging.
6. The student will be able to express their ideas in oral form through critiques and presentations.
7. The student will be able to utilize appropriate artistic strategies such as the use of color, texture and figure-ground balance in the creation of images.
8. The student will be able to print out portfolio quality images using ink jet printers.

**Course Materials:**

Digital Paper: Ultra Pro Satin

8gb flash drive or external drive.

Printer Ink

**Description of Major Assignments:**

***Deconstruction*:** Students use items of [popular culture](http://en.wikipedia.org/wiki/Mass_culture), such as [advertising](http://en.wikipedia.org/wiki/Advertising) and [comic books](http://en.wikipedia.org/wiki/Comic_books) to learn about image analysis, taking existing elements apart and then reorganizing them in the creation of new pieces. As part of the assignment students are to consider the idea of movement and action, as well as narrative in their images. 4 images required.

***Line:***Students will make 4 images focusing on the use of lines to create images. Consideration of negative vs. positive space as well as the creation of depth using lines to create overlapping surfaces will be used as the basis for two required images plus two additional images of the student’s choice.

***Music Analysis:*** In this assignment students will note how specific music affects them and then recreate in imagery what that might look like. What symbolism do you recognize in the song and how can that be represented in your images? Or, how does the emotional mood of the song translate into a visual format?

Choose 4 musical genres and create 4 pieces – one to represent each genre.

***Comparative Surrealism:*** Surrealism is the practice of producing fantastic or incongruous imagery in art or literature by means of unnatural juxtapositions and combinations. In this project, students will make 4 images, 1 similar in style to each of the surrealist artists discussed in class.

**Jan 16** Introduction; reminder: for class next time bring a 4-8 gb flash drive or external drive;

Discuss Glossary quiz on Jan 23 (INCLUDES KEYBOARD COMMANDS)

Use Red River Catalog and Imaging Spectrum, for paper and ink.

**Jan 18** Bi-cubic Format, Constrain Proportions, Bi-cubic Sharper, Bi-cubic Smoother, Re-sample an Image, Transparency, Color Background and File Formats: .tif, .jpg, .psd, and raw format extensions, Bit Depth. Scanner Demo. Resize image, background color and opacity exercise.

**Jan 23** Glossary Exam; Basic Menus: Brush Size and Hardness, Angle and Style of Brush, Option Bar, Tool Box, Layer Palette, Opacity and Palette links to tools (bottom of palette box)

Photoshop Tool Box:

Move Tool, Rectangle Marquee, Elliptical Marquee, Lasso Tool, Polygonal Lasso Tool, Magnetic Lasso Tool, Quick Selection Tool, Magic Wand Tool, Crop Tool, Eye Dropper Tool, Color Sampler Tool, Ruler Tool, Crop Tool, Hand Tool.

Selection/Scan- Exercise from tools above. **Repeat exercises**

Healing Tool, Spot Healing Tool, Patch Tool, Red Eye Tool, Brush Tool, Color Replacement Tool, Clone Stamp Tool, History Brush Tool, Eraser Tool, Gradient Tool, Paint Bucket Tool, Sharpen Tool, Smudge Tool, Paint Box, Delete Layers.

**Repeat exercises.**

**Jan 25** **VIDEO** – contemporary artmaking

Layer Styles, Level Tool, Curves Tool, Dodge Tool, Burn Tool, Rectangle Tool, Rounded Rectangle Tool, Ellipse Tool, Line, Sponge Tool, Custom Shape Tool.

**Repeat exercises.**

Edit Menu: Undo, Step Forward, Step Backward, Fade Brush Tool, Cut, Copy Merged, Copy, Paste, Paste Into, Clear, Fill, Stroke, Free Transform, Transform: scale, rotate, skew, distort, perspective, warp, rotate, flip horizontal, flip vertical.

**Repeat exercises.**

Extra: Gaussian Blur, Lighting Effects, Opacity, Hand Tool, Rotate, View Tool, Zoom Tool, Default B&W, Paint Box, Quick Mask Mode, Edit Mode, Pen Tool, Duplicate. **Repeat exercises.**

**Jan 30** **Blending Exercise Review**: Scale, Clear, Gaussian Blur, Opacity, Drag and Drop, Magic Wand, Cut, Blur Tool

Supervised lab

Scan textures for class library. Color Range Tool, Liquify

Image Menu: Image Size, Canvas Size, Bitmap, Grayscale, Duotone, Indexed Color, RGB Color, CMYK Color, Lab Color, Multi-channel Color, 8 bit/channel, 16 bit/channel, 32 bit/channel. **Repeat exercises**.

Adjustments: Brightness/Contrast, Levels, Curves, Exposure, Hue/Sat, Color Balance, Black and White, Photo Filter, Channel Mixer, Invert, Gradient, Map, Selective, Shadows/Highlights, Variations, De-saturate, Match Color, Replace Color, Auto Tone, Auto Contrast, Auto Color, Histogram, Navigator. **Repeat exercises.**

**Feb 1** **Assignment: *Pop Art Deconstruction (Feb 22 critique)***

Making Textures, Bevel and Emboss, Image Rotation, Trim, Reveal All, Duplicate, Apply Image, Inner shadow, Outer Glow Inner Glow, Drop Shadow, Bevel and Emboss, Satin, Color Overlay, Gradient Overlay, Pattern Overlay, Stroke, Layer Style, Clear Layer Style, Global Light. **Repeat exercises.**

**Feb 6** Supervised Lab/Current Project: Bring materials to use for in-class work.

Lecture and Demo: Reveal All, Hide All, Masks, Vector Mask, Create Clipping Mask, Link Layers, Merge Down, Merge Visible, Merge Layers, Flatten Image

**Repeat exercises.**

**Feb 8** Lecture and Demo: Select Menu: All, Deselect, Reselect, Inverse, All Layers, Deselect Layers, Refine Edge, Modify, Grow, Similar, Transform Selection, Load Selection, Save Selection, Duplicate. Filter Menus: Liquefy, Artistic, Noise, Pixelate, Render, Sharpen, Sketch, Video, Digimarc, Liquefy Tool. **Repeat exercises.**

**Feb 13** Supervised Lab/ Student Lecture using Drawing Tablet

Printing Demo

**Feb 15**  Supervised Lab, Interim Critique of Deconstruction Project

**Feb 20** Analysis: Count Tool, Calculations, View: Zoom In/Out, Fit on Screen, Actual Pixels, Print Size, Screen Size, Actual Pixels, Extras, Show, Snap, Snap to, Lock, Guides, Clear Guides.

**Repeat exercises.**

Creating gray-scale images, grayscale mode vs. de-saturation, b &w mode, change under adjustments, using grayscale to adjust image, replacing color in an image, replacing color on a dark image, blending layers using grayscale. **Repeat exercise.**

Shapes, combining paths into a filled shape, Healing Tool, Spot healing Tool.

**Repeat exercises.**

**Feb 22** **Critique: *Pop Art-Deconstruction***

**Feb 27** **Assignment: *Line (March 22 critique)***

Pen Tool using skull drawing

Supervised Lab. Refine Edge, Pencil Tool, Text tool, Paint Bucket, Rotate Image, Rasterize.

**Repeat exercises.**

**Mar 1** Supervised Lab. Improving shadow and highlight detail camera files in Photoshop, Select and Re-Select, Air-Brush, Subtracting Shapes. **Repeat exercises.**

**Mar 6** Supervised Lab, Matching Color. **Repeat exercise.**

**Mar 8** Supervised Lab, Mixing Channels, Interim Critique. **Repeat exercise.**

**Mar 12-17** *Spring Vacation*

**Mar 20** Supervised Lab

**Mar 22** **Critique: *Line***

**Mar 27** **Assignment: *Music Analysis (April 12 critique)***

Discussion: What does Sound Look Like?

Content-Aware Scale, Action Tool, Smart Objects, Knock Out Gradient, Puppet Warp, Photo Merge, Writing an artist statement. **Repeat exercises.**

**Mar 29** Supervised Lab: Making a Glitch In Class Exercise/Assignment

**Apr 3** Supervised Lab: Elephant in Glass In Class Exercise/Assignment

**Apr 5** Supervised Lab, Interim Critique

**Apr 10** Supervised Lab

**Apr 12 Critique: *Music Analysis***

**Apr 17** **Assignment: *Comparative Surrealism***

**Apr 19**  Supervised Lab

**Apr 24** Supervised Lab

**Apr 26**  Supervised Lab, Interim Critique

**May 1** Supervised Lab

**May 3** **Critique: *Comparative Surrealism***

**Attendance:** At the University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator in student success. Each faculty member is free to develop his or her own methods of evaluating students’ academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, I have stated that “Attendance at scheduled classroom sessions, field trips and critiques is mandatory unless absence is approved by instructor.”.

**Grading:** Individual project grades are based on both content and technical aspects of the work. Projects that are turned in late will be lowered one letter grade for each class day the assignment is late.

Percentages used for final grade are as follows: 10% attendance and participation, 5% in-class exercises, 5% computer vocabulary exam, 80% projects (20% each.)

During the late registration period, a student may withdraw from all courses for the current semester using either the online MYMav student self-service web pages or by contacting their major academic department. Students are responsible for following the university regulations concerning adds and drops. (See undergraduate catalog for details.)

**Grade Exclusion Policy**

As of the first day of classes Fall 2006 and after, new students and continuing students who have not yet attempted a grade replacement for one or more courses at UTA are eligible to utilize the grade exclusion policy. (See undergraduate catalog for details)

**Grade Grievance Policy**

I will do whatever I can to help you learn the material, gain the skills and understand the assignments in this class. It is your responsibility to keep me informed regarding you progress with the material so that I can help you before assignments are due. If you have any question or concerns regarding course content address the issue with me first. If an understanding cannot be reached between the professor and student it will then be immediately brought to the attention of the administration.

**Disability Accommodations:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 93112- The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans with Disabilities Act- (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

The University provides “reasonable accommodations” to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designed administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at [www.uta.edu/disability](http://www.u;ta.edu/disability). Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at 817-272-3364.

**Title lX**: *The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu. For information regarding Title IX, visit* [*www.uta.edu/titleIX*](http://www.uta.edu/titleIX)*.*

**Academic Integrity:** It is the philosophy of the University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. “Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.” (Regents’ Rules and Regulations, Series 50101, Section 3.22)

**Lab Safety Training**: Students registered for a course that requires lab safety must have training prior to entering the lab and undertaking any activities.

**Expectations for Out-of-Class Study:** I have scheduled work days to complete work in the digital lab or print lab, but students are required to spend 6 to 8 hours of work each week making images for each assignment.

**Electronic Communication:** UT Arlington has adopted Mav Mail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a Mav Mail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and and using Mav Mail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

**Campus Carry**: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit <http://www.uta.edu/news/info/campus-carry/>.

**Student Feedback Survey:** At the end of each term, students enrolled in face-to-face and online classes categorized as “lecture,” seminar,” or “laboratory” are directed to complete an online Student Feedback Survey(SFS). Instructions on how to access the SFS for this course will be sent directly to each student through Mav Mail approximately 10 days before the end of the term. Each student’s feedback via the SFS database is aggregated with that of other students enrolled in the course. Student’s anonymity will be protected to the extent that the law allows. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit <http://www.uta.edu/sfs>.

**Student Support Services:** UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource hotline at 817-272-6107, send a message to [resources@uta.edu](mailto:resources@uta.edu).

**University Tutorial & Supplemental Instruction**. (TSI offers a variety of academic support services for undergraduate students, including: 60 minute one-on one tutoring sessions. For more information visit [www.uta.edu/utsi](http://www.uta.edu/utsi)

**The IDEAS Center (2nd floor of Central Library)** offers FREE tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. Students can drop in, or check the schedule of available peer tutors at www.uta.edu/IDEAS, or Call 817-272-6593.

**The English Writing Center (411 LIBR)** The writing Center offers free tutoring in 10-60 minute face to face meetings and make appointments online at <https://uta.mywconline.com>

**Final Review Week:** for semester-long courses, the Photography Area usually schedules critiques for final portfolio class work during Final Review Week. Faculty are available during Finals Week for meetings, discussion and pick up of final portfolios. The photography area schedules a Photo Area Portfolio Review during Finals Week after completion of 9 upper level credits and again at the semester prior to graduation. This is a comprehensive review with the entire photography faculty and is highly recommended although not required by the Art Department.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located at the stairwells near the classroom and the FA 368C digital lab. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

You are also encouraged to subscribe to the MavAlert system that will send information in case of an emergency to their cell phones or email accounts. Anyone can subscribe at <https://mavalert.uta.edu/> or <https://mavalert.uta.edu/register.php>

**Library:** The most important library to our students is the Fine Art and Architecture Library located in the Architecture Bldg.

**Glossary:**

**Anti-alias** - The blending of pixel colors along the perimeters of hard-edged shapes, such as type, to smooth undesirable stair-stepped edges, or "jaggies."

**Binary**- In Photoshop, a method for encoding data. Binary encoding is more compact than ASCII encoding.

**Bitmap** - The display of a picture on a computer screen via the geometric mapping of a single layer of pixels on a rectangular grid. In Photoshop, Bitmap is also a one-channel mode consisting of black and white pixels.

**Bit** -(Binary digit) The smallest unit of information on a computer. Eight bits equal one byte.

**Byte** - The basic unit of storage memory. One byte is equal to eight bits.

**Kilobyte** - (K, Kb) A unit of memory equal to 1,024 bytes.

**Megabyte** - (M, MB) A unit of memory equal to 1, 024 kilobytes.

**Gigabyte** -(G, Gb) A unit of memory equal to 1, 024 megabytes.

**Canvas Size** - The size of a picture, including a border, if any, around the image.

**CD-ROM** - A special digital drive for reading CD- ROM disks. Most CD-ROM drives are read only.

**RGB** - Color produced by transmitted light. When pure Red, Green, and Blue Light (additive primaries) are combined, as on a computer monitor white is produced. In Photoshop, RGB Color is a three-channel picture mode.

**CMYK** - (Cyan, Magenta, Yellow, and Black) The four colors of ink used in process printing. They are subtractive primaries.

**Contrast** - The degree of difference between lights and darks in a picture. A high contrast picture is comprised of only the lightest and darkest pixels.

**DPI** - (Dots Per Inch) A unit used to measure the resolution of a printer.

**Fill** - To fill a selection with shade, color, pattern or blend.

**Selection** - An area of a picture that is isolated so it can be modified while rest of the picture is protected. A moving marquee denotes the boundary of a selection of its contents. A selection can contain underlying pixels or temporarily float above underlying pixels.

**Floating Selection** - An area of a picture that is surrounded by a marquee and can be moved or modified without affecting underlying pixels. The Paste and Float commands create floating selections. Newly created type also appears as a floating selection.

**Marquee** - (Also known as marching ants) The border that defines a selection.

**Inverse** - To switch the selected and non-selected areas of a picture.

**Invert**- To reverse an image’s light and dark values

**Grayscale** - A picture containing black, white, and up to 256 shades of gray, but no color. In Photoshop, Grayscale is a one-channel mode.

**Foreground color** - The color applied when a painting tool is used, type is created, or a Fill command is executed.

**Hue** - The wavelength of light of a pure color that gives a color its name, such as red or blue, independent of its saturation or brightness.

**Mode** - A method for specifying how color information is to be interpreted. A picture can be converted to a different mode using the Mode menu: a mode can be chosen for painting or editing tool via pop-menus. ( e.g. Grayscale, RGB )

**Opacity** - The density of a color or shade, ranging from transparent to opaque. In photo shop, the opacity for a painting or editing tool is specified by using the Brushes palette.

**Pixel** - (Picture elements) The individual dots used to display a picture on a computer screen.

**RAM** - (Random Access Memory) The system memory of a computer used for running an application, processing information, and temporary storage.

**Scan** - To digitize a slide, photograph or other artwork using a scanner and scanning software so it can be displayed, edited, and output from a computer.

**Resolution** - The fineness of detail of a digitized image (measured in pixels per inch- usually 72 ppi), a printer (measured in dots per inch), or a halftone screen (measured in lines per inch).

**TIFF** - (Tagged Image File Format) A file format used for saving bitmapped images, such as scans. TIFF pictures can be color separated.

**Adjustment Layer**: Is used to try out tonal and color adjustments, and then merge the adjustment layer downward to apply the effect.

**Vector:** Mathematically defined editable type and shapes

**Rasterize:** Type changed from vector based to pixel based. Once type is rasterized its typographic attributes can’t be changed.

**Key Commands**

|  |  |
| --- | --- |
| Delete selection | Apple d (all keys are lower case) |
| Cut | Apple x |
| Copy | Apple c |
| Paste | Apple v |
| Open | Apple o |
| Merge layers | Apple e |
| Healing Tool | j |
| Clone Tool | s |
| Eraser Tool | e |
| Hand | h |
| Save | Apple s |
| Undo Selection | Apple z |
| Free Transform | Apple t |
| Zoom in | Apple + |
| Zoom out | Apple - |
| Print | Apple p |