

## Course Syllabus

### **Course Information**

ATEC 2382.5U1 – Computer Imaging

Classroom: ATC 3.910

Thursdays, 6 – 9:45 p.m.

Summer 2016

### **Professor Contact Information**

Christi Nielsen

Phone: 972-883-7516

Email: [christina.nielsen@utdallas.edu](mailto:christina.nielsen@utdallas.edu)

Office Hours: ATC 3.609 Tuesdays 10-2, Thursdays 4-6

Contact Policies: The best way to reach me is by email. Use official UTD email only. In all emails that you sent to me, you must identify yourself by name and class.

### **Course Description**

The nature of this course is to integrate technical ability with visual communication as they relate to digital art and design. Computer images are prepared for multiple delivery environments, including internet, games and animation. Students will apply the techniques of digital imaging using tools in Adobe Photoshop software, in concert with fundamental knowledge of the elements and principles of art. Students will be encouraged to use divergent thinking in problem solving as a way to address emerging media.

This is a major requirement lower-division course for students pursuing an undergraduate degree in the ATEC & EMAC programs. The course is a full 11 week session, meeting once a week for 4 hours per week in a computer lab environment. Additional time outside of class is required to complete assignments. Course delivery is a blend of online, lecture and lab environment.

### **Student Learning Objectives/Outcomes:**

- Students will design and create personal expression through visual composition that successfully demonstrates the use of design theory and digital media tools.
- Students will communicate knowledge of elements and principles of art through at least one digital art medium related to their degree focus.
- Students will participate in critique activities through group discussions of observable work created in current imaging software as well as written critical analysis.
- Students will analyze, assess, and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.

### **Course Requisites**

Students should have moderate computer navigation skills plus basic knowledge of online social etiquette and work ethic. Activities require regular access to a computer with internet capability and Adobe Photoshop Extended CS6 installed. Students will need a NetID to access lab computers and eLearning, plus a UTD ID number to access additional instructional materials through the UTD Library.

#### Required Textbooks/Materials

- *Adobe Photoshop CC Classroom in a Book* (2014 release), the official training workbook from Adobe, Andrew Faulkner, c2015

Online e-books are available through the McDermott Library.

Students require an active UTD ID in order to access this reference.

**Please note:** be able to answer all questions at the end of each chapter.

- Computer access to eLearning for online classroom content
- Personal storage device (approximately 4GB flash drive for transport to/from ATEC labs)
- Access to digital cameras

Not required, but helpful – Wacom tablet for more precise editing

#### Student Resources

- McDermott Library: <http://www.utdallas.edu/library/>
- Remote access: Students may download VPN software for off-campus network access <http://www.utdallas.edu/ir/howto/utd-vpn>
- UTD Computer Helpdesk: For UTD connectivity problems, call 972-883-2911 or email: [assist@utdallas.edu](mailto:assist@utdallas.edu). Further information on the website: <http://www.utdallas.edu/ir/helpdesk>

#### Grading Policy

- Class attendance and participation = 20pts (this includes working on task at hand in class)
- Lessons from *Adobe Photoshop CC Classroom in a Book* = 20pts
- Two quizzes = 20pts
- One written critique = 10pts
- Three major projects = 30 pts

#### Course and Instructor Policies

Class attendance is expected of all students, *more than one* unexcused (1) absence will negatively affect your grade. *More than three* (3) absences will result in a failing grade. Lateness or leaving early is unacceptable. If you arrive 30 minutes late or leave 30 minutes early you will be marked as absent.

Participation is a vital part of the learning process. Please try to be as fully present and engaged as possible (no cell phones, earbuds, or Internet during class). Participation

includes answering questions, engaging in class discussions, and demonstrating a professional and positive attitude.

To expedite learning process for all, be ready with all assignments when they are due. Late work will only be accepted under major extenuating circumstances. All late work receives lower grades. No make-up quizzes unless you have a doctor's note.

### Technical Requirements

#### Personal Computer Software

- Web browser: Firefox, Chrome or Safari (UTD prefers that you DO NOT use Internet Explorer)
- Virus detection/protection software. (McAfee is free to students!)  
[https://www.utdallas.edu/infosecurity/downloads3/IS\\_login.htm](https://www.utdallas.edu/infosecurity/downloads3/IS_login.htm)
- A zip file expansion tool such as WinZip

### eLearning Online Access

UTD Ned ID account needed to log in to the course through UTD eLearning:  
<http://elearning.utdallas.edu>

### Getting started with eLearning information

<http://www.utdallas.edu/elearning/students/getting-started.html>

UTDeLearningSupportCenter: <http://www.utdallas.edu/elearninghelp>

### UTD Syllabus Policies and Procedures

Please review the University Policies and Procedures  
on: <http://coursebook.utdallas.edu/syllabus-policies/>

### **Assignment naming: LastName FirstName lesson1**

### Schedule

#### **Week 1 – May 26**

Introductions; syllabus review; eLearning; how to access textbook

#### **Homework:**

**Read:** Chapters 1 and 2 in your textbook.

**Complete:** Lessons 1 and 2. Upload to eLearning before class next week.

**Find:** a piece of art that you will critique and bring to class next week.

## **Week 2 – June 2**

Turn in before class starts, Lessons 1 and 2.

**Class:** Intro to art critique; CI Basics; Intro to Design/Elements of Art, Photoshop topics: basic tools and panels; basic adjustments; opening and editing in Camera Raw; straightening and cropping an image; Clone Stamp; Spot Healing brush; Content-Aware Patch tool; Using Bridge; selection tools including magic wand, lasso, magnetic lasso; rotating a selection, cropping an image and erasing within a selection, softening the edges of a selection; how to zip or compress your files.

### **Homework:**

**Read:** Chapter 3

**Complete:** Lesson 3. Upload to eLearning before class next week.

**Write:** a 2-3 page cohesive art critique, including a picture of the piece and a bibliography of your readings on this work. Save this document as one PDF file and upload to eLearning before class next week.

---

## **Week 3 – June 9**

Turn in Lesson 3 and your Art Critique before class.

**Class:** Discuss Design Principles: Contrast, Emphasis and Proportion; Balance; Photoshop Topics: Layer Basics; organizing artwork on layers; create, view, hide and select layers; resizing and rotating layers, add text and layer effects to a layer, flattening layers; file types; understanding image resolution and size. Discuss **mid-term project that will be due June 23**.

### **Homework:**

**Read:** Chapter 4

**Complete:** Lesson 4. Upload to eLearning before class next week.

---

## **Week 4 – June 16**

Turn in Lesson 4.

### **Class: Quiz 1**

Discuss Design Principles Rhythm, Pattern and Movement. Photoshop topics: Correcting and Enhancing Digital Photographs, including removing red eye and noise and bringing out shadow and highlights detail, working with depth of field, merging images of different exposures to create a high dynamic range (HDR) image.

### **Homework:**

**Read:** Chapter 5

**Complete:** Lesson 5. Upload to eLearning before class next week.

---

## **Week 5 – June 23**

Mid-term project is due. You will present your projects to class.

**Class:** Photoshop topics: masks and channels, puppet warp, saving a selection as an alpha channel, load a channel as a selection, isolating channels. Learn about masks and masking on p. 184. Know this!

**Homework:**

**Read:** Chapter 6

**Complete:** Lesson 6. Upload to eLearning before class next week.

---

**Week 6 – June 30**

Turn in Lesson 6 before class starts.

**Class:** Review RGB Color Wheel

<https://color.adobe.com/create/color-wheel/>

<http://www.colourlovers.com/>

Select color palettes from one of the above listed pages.

Design Principles: typographic design, formatting text. Photoshop topics: making a clipping mask from type, formatting text, distribute text along a path, create and apply type styles.

**Begin In-Class project: Marketing Campaign**

**Homework:**

**Read:** Chapter 7.

**Read:** “The Code Side of Color”:

<http://www.smashingmagazine.com/2012/10/04/the-code-side-of-color/>

**Complete:** Lesson 7. Upload to eLearning before class next week.

Develop a self-portrait in Photoshop. Details will be explained in class. This will be due next week, July 7.

---

**Week 7 – July 7**

Turn in Lesson 7 and your self-portrait before class starts.

**Class:** Talk about bitmap images and vector graphics, vector drawing techniques, draw and edit shape layers, draw custom shapes. Design Principles: Unity and Variety.

Continue to work on class project.

**Homework:** Read Chapter 8

**Complete:** Lesson 8. Upload to eLearning before class next week.

---

**Week 8 – July 14**

Turn in Lesson 8 before class starts.

**You will present campaign projects to the class.**

**Class:** Spend more time using the pen tool, selecting and deselecting paths, subtracting shapes from a shape layer, working with defined custom shapes, making your own patterns.

**Homework:** Read Chapter 9

**Complete:** Lesson 9. Upload to eLearning before class next week.

---

**Week 9 – July 21**

Turn in Lesson 9 before class starts.

**Class: Quiz 2**

Talk about requirements for your Final Projects. Photoshop topics: automating a multistep task, recording actions, playing an action, stitching a panorama image, 3D objects.

**Homework:**

**Read:** Chapter 12

**Complete:** Lesson 12. Upload to eLearning before class next week.

---

**Week 10 – July 28**

Turn in Lesson 12 before class starts.

**Class:** Open class to work on final projects. **Attendance is mandatory.** I will spend time with each student assuring that you are on the right track with your final project.

**Homework:**

Finish up your final project to present to class next week.

---

**Week 11 – August 4**

Class will present their final projects to the class.