IT 270 Graphics & Animation

SPRING 2014
Monday | Wednesday, 10:30 - 11:45am
LEARN Enhanced Course
Professor: Alexa Wheeler
alexa08@unm.edu

Campus Office Hours: Wednesday 2:30 -4
                        And by appointment

Virtual Office Hours: by email, text, and by appointment for live chat
                        **see "How to Contact the Instructor" below

Office: Business & Technology Building Rm. 110A

Course Description

This course is designed to provide students with a fundamental working knowledge of the technical, aesthetic, and conceptual aspects of computer generated graphics and two-dimensional animations. Lectures, demonstrations, discussions, and other content will introduce various issues of design and animation. Assigned projects, readings, presentations, and group critiques will assist in a critical understanding better preparing the student for further study in the graphics and animation.

Objectives

-   Demonstrate excellent understanding of the drawing, shape, and animation tools to create shape, depth, drawing, tracing, text, and animations.
-   Develop a good working knowledge of the basics of 2-D animation
-   Demonstrate several advanced features in Illustrator and Flash.
-   Enhance your ability to think visually and communicate your ideas as such.
-   Perfect your ability to discuss and defend your work in relation to concepts, ideas, techniques, processes, and experiences.
-   Understand major developments in graphic arts as they have occurred throughout time.
-   Develop a familiarity with the variety of media available in the graphic arts and understand the limitations and opportunities offered by these various materials and techniques.
-   Demonstrate an excellent understanding of the components of art and design (balance, unity, line, composition, color theory, visual rhythm, etc...), and use this language to discuss, debate, and create.
-   Gain an excellent working knowledge of the Mac computer and it's operating system

Required Online Subscription

lynda.com Online Video Tutorial Library
Illustrator CS4 Essential Training & Flash Professional CS4 Essential Training
Available free of charge to UNM students at: lynda.unm.edu

Student Responsibilities/Attendance/Participation

Student Responsibilities:
- Students <u>must</u> have basic computer and file management skills for all DMA courses. Custom tutoring services are available through the TLC. Required pre/co requisite is IT 101: Computer FUNdamentals. Students that fall behind due to lack of basic computer skills will be dropped.
- Bring a USB Flash Drive (at least 8 GB) to every class. Make sure it is clearly labeled with your name on it. Always keep a back-up of ALL classwork.
- Have a UNM email to access UNM Learn:
    - Students will access supplemental information, class agenda/syllabus, and their grades through UNM Learn at https://learn.unm.edu. Just enter your NetID and your password. You must set-up a UNM email account (https://netid.unm.edu) if you do not already have one.
- If you have a disability, please inform me of your needs as soon as possible to ensure that your needs are met in a timely manner.
- Students must have required subscription to Lynda.com to succeed.
- Cell phones need to be muted during class times. If you must receive a call, leave the lab before you answer. No phone conversations in the studio. No web browsing, email, or text messaging during lectures, demos, discussions, or critiques.
- **COMPUTERS WILL BE OFF DURING ALL CRITIQUES!!!**

Attendance/Participation:
- Students are required to complete all projects on time, participate in scheduled critiques/class discussions, watch posted Lynda.com video tutorials in the week they are posted, and maintain a safe, respectable, positive lab environment.
- Students are required to attend class, arrive on time, remain present until the end of class, and be prepared for each day's work. More than three absences without prior consultation may result in a failing grade or a drop from the class. Leaving early or arriving late three times results in one absence.
- If you have not attended class for three consecutive class periods and have made no attempt to text/email/IM/contact me, you WILL be dropped.
- Students who do not attend the first week of class will automatically be dropped.
- Students will need to work a few hours each week in addition to the scheduled class times. Open lab hours will be announced

Grading Policy

Grading:
- Grading is based on a timely completion of course assignments, the quality of individual technical and critical development, conceptual progress, personal commitment and the ability to work in a community studio setting. Personal commitment involves regular attendance, consistent effort, completion of work, participation in critiques and class discussions, and the general willingness to try. Make each project meaningful to yourself!
- Each assignment will culminate in a critique, which will consist of pinning up your work and/or projecting your completed work in class for all to see. All due dates will be announced in the YELLOW BOX on UNM Learn, as well as on the syllabus. No full credit will be given for any late work. If an assignment is not presented on time, an automatic 0 will be issued. You will need to make arrangements with me if you are planning to make-up the work, and a fair grade will be issued once the work has been submitted, presented, and critiqued, minus an automatic one letter grade deduction.
- Incompletes are rarely issued. If 75% of the semester's work/projects/deliverables and participation/attendance have been completed with a satisfactory grade, and incomplete may be issued.

Grading Breakdown

Semester Requirements:

Projects (2)   40 points   20 points each

Midterm & Final Projects   60 points   30 points each

Make-Up/Extra Credit:

Extra Credit   10 points maximum for the semester

Points will be added up and a letter grade will be issued according to the following scale:

A+	101+
A	94-100
A-	90-93
B+	88-89
B	84-87
B-	80-83
C+	78-79
C	74-77
C-	70-73
D+	68-69
D	64-67
D-	60-63
F	50-59

How to Contact the Instructor

Weekly Office Hours:
- Office Hours are held weekly on-campus and virtually.
- On campus, the office hours are:
  - o   Wednesday 2:30 - 4 in B&T Rm. 110A, or check other DMA classrooms
  - o   Also, by appointment
- Virtually, reach me any other time through email, text … (see below).

Email:
  I prefer all email to be from the internal UNM Learn class email. I will check this UNM Learn email   regularly and will respond to all emails within 48 hours (72 hours weekends), and usually sooner.
  Although less preferred, you can email me at alexa08@unm.edu. In the Subject Line of the email, ALWAYS write your full name and class number. For example – "Laurie Anderson IT 270"

Text:
You can also reach me **BY TEXT ONLY** at: 505-515-1055. I WILL NOT answer phone calls and ask that you please NEVER LEAVE A MESSAGE!!! Any messages left by students will be deleted and will not constitute an attempt at communication. In the event of an absence, you will be counted unexcused if you only left a message and made no other written attempt at communication. All communication between instructor and student outside of class time MUST be in written format for this class. If you must reach me or have an emergency, USE: email, text, or my office phone (if needing to leave a message – as a last resort) at 925-8702.

Support Information, Resources, & Tutorials

Open Studio Time – Digital Media Arts Open Lab & Darkroom:
- Located in Room 123A in the Business & Technology Building (directly in front of the current B&T open computer lab Room 123). You will need to enter the lab through the current B&T computer lab and sign-in to use the computers.
- Times and hours posted on UNM Learn

Support for UNM Learn:
  - o   - UNM Learn help: http://UNM Learninfo.unm.edu/student/.

DMA / UNM Valencia Tutoring Services:
- We are proud to have our very own DMA tutor available for Digital Media Arts specific courses! You can walk-in or if you prefer to make an appointment during these times, please call the Learning Center at 925-8900.

- Custom tutoring services are available through The Learning Center http:// www.unm.edu/~tutor/. Even online tutoring is available

Other tutorials:
- I will post a number of links to video tutorials in UNM Learn for this course.

Instructor Support:
- Please see "How to Contact the Instructor" for methods of contacting the instructor for help.

Community Support:
- We will have a HELP FORUM discussion board in the UNM Learn course. Use this as a place to post questions to the community. It is important for peer learning and peer communication to enhance our community.

Illustrator Project 1: Childhood Memory Book Cover

Objective:
Familiarize students with basic tools in Illustrator and many basic elements of design and color theory. Consider the use of drawing tools to enhance the visual idea of memory vs. reality. To understand what a cover design is, and what elements are needed to create a harmonious and graphic design composition. To understand the basics of cover design, and the visual elements/ materials of this process.

Process:
Using your own childhood as the inspiration, imagine you have been hired to illustrate the cover design for a children's book. Design and illustrate this cover design with the intention of trying to tell the entire story to the audience in one image. Dig deep! Incorporate all technical requirements as listed below. Consider: Who is the intended audience? What age? What culture? What language? Is it fiction or non-fiction? Educational or recreational?

Technical Requirements:
1. New Document – 8.5" x 11"
2. Use at least three of the shapes in the Shape Tools – NO LENS FLARES!!
3. Create at least 1 Object Group
4. Include at least 3 logically organized layers in your design
5. Apply strokes and fills to at least 3 objects using the Appearance Panel
6. Apply at least 1 effect to an object (or group) using the Effects in the Appearance Panel
7. Live trace at least 1 object and expand the appearance & "Place" a photograph as a graphical element (can be same photograph)
8. Live paint at least 1 object
9. Use text for the book title
10. You may find the need to: refine curves, cut paths, join paths, erase paths, and add and remove anchor points as you work on these requirements for your illustration

Illustrator Midterm Project: Logo and Package Design

Objective:
Familiarize students with more advanced tools in Illustrator and further the investigation into elements of design and color theory. Consider the use of color, and what it means to work within a distinct color family. Learn how to organize, manage, save, scan, and print files. To understand what a logo is, and what elements are needed to brand a company. To understand the basics of packaging design, and the visual elements/materials of this process.

Process:
Design and illustrate a logo for either a real or fictitious company. Choose a product to market for this company, and create a package design (letterhead, envelope, business card) that incorporates the logo. Logo Package Design to include 3 documents: Envelope (4.125" x 9.5"), Business Card (3.5" x 2") and Letterhead (8.5" x 11"). Incorporate all technical requirements as listed below. Consider: How does the typography enhance the design? What graphics will really depict your company? Do the product and the packaging have a harmonious relationship? Yes? No? Why?

Technical Requirements:
1. Logo Package Design to include 3 artboards: Envelope (4.125" x 9.5"), Business Card (3.5" x 2") and Letterhead (8.5" x 11"). Use any and all the previous techniques learned up to this point
2. Text on a path OR Text in a shape
3. Text that has been converted to outlines and modified
4. Layers must be organized in a logical fashion according to the design
5. Must have 3 artboards that represent:
   a. Envelope – 4.125" x 9.5"
   b. Business Card – 3.5" x 2"

       c.   Letterhead – 8.5" x 11"
6. Use colors harmoniously – see "Kuler"
7. Create and include the logo as a symbol with at least 3 Appearances – one on each of the artboards
8. Include at least 2 effects from the Effect > Illustrator Effects > Stylize menu, one of which needs to have been edited through the Appearance Panel
9. Modify the opacity of at least 1 object/layer – can be "opacity" or "blending modes"
10. Use at least 1 gradient and/or pattern
11. Use any other previously learned techniques as you wish
12. Save the file as both an illustrator file and as a layered PDF
13. Print the three files and mount on posterboard to turn in and post for critique as extra credit.

Flash Project 1: Bouncing Ball Interpretation

Objective:
Familiarize students with the tools and practices of importing, drawing, and creating shapes, artwork, and animations in Flash. To understand the basic ingredients of the interface: creating new documents, saving files, testing animations, tools overview, color palette, swatches, tweens, masks, guide layers, and layers in general. To understand squish and stretch and such techniques as used in animation. To create a basic animation in an environment.

Process:
Create a bouncing ball sequence of at least 15 seconds in length at 24 fps. Place the sequence in an environment. Create an "action and reaction" event that has caused the ball to bounce. This can be as fantastical or realistic as you choose. Consider: sports, outer space, car crash, blood cells, birth, death, human head, video game, martial arts, microorganisms, light, dark, etc...

Technical Requirements:
1. New ActionScript 3.0 document
2. A 600 x 400 stage measured in pixels
3. Frame rate of 24 fps
4. Create at least 1 shape using the Merged Drawing model
5. Create at least 1 shape using the Object Drawing model
6. Create at least 1 shape, or part of a shape, by Combining Objects
7. Create at least 1 Oval Primitive shape with at least 1 modification OR Create at least 1 Rectangle Primitive shape with at least 1 modification
8. Use text at least once
9. Include at least 3 logically organized layers and 1 layer folder in your design
10. Use at least 1 motion tween (must be symbols)
11. Modify the motion path after it has been created by repositioning and modifying the curve (Selection Tool), transforming (Free Transform Tool), and Keyframing in the Motion Editor
12. You may find the need to: modify paths and anchor points, change and work with fill and stroke colors, change layer order and objects within those layers, as you work on these requirements for your animation
13. Export as 2 movie files (swf & mov) and save as a Flash file. Place in proper network folder.

Flash Final Project: Animation & Portfolio

Objective:
Familiarize students with the advanced tools and practices of importing, drawing, and creating shapes, artwork, and advanced animations in Flash. Learn how to organize, manage, save, and export files. To enhance a flash project with sound.

Technical Requirements:
1. Use any and all the previous techniques learned up to this point as you wish
2. New ActionScript 3.0 document
3. Stage size – your choice – maximum in either direction – 1200 pixels
4. Frame rate of 30 fps maximum
5. At least 2 minutes in length
6. Have at least 6 layers, all uniquely labeled
7. Use at least 1 shape tween (mergeable artwork or drawing objects)
8. Use at least 1 imported still image and Import to Stage (photograph)
9. Use at least 1 imported Illustrator file as a movie clip, converted into Keyframes or as Flash layers and Imported to Stage
10. Must include a sound layer. Think about the length of the animation. Points will be deducted for a soundtrack that makes an abrupt ending rather than one that was truly meant to span the animation.
11. You may also experiment with "boning" and nested animations for extra credit.
12. Export as 2 movie files (swf & mov) and Publish for the Web
13. Publish the animation to the web – time permitting

Course Schedule

Spring 2014:
Semester begins January 21
Semester ends May 8
HOLIDAYS:
Spring Break: March 17 - 21 – Week 9

Dates	Schedule	Online Tutorials (lynda.com)	Projects
Week 1	• Introductions • Review Syllabus • Review UNM Learn • Lecture • Equipment Overview • Supplies Overview • Classroom Folders/Network • Lynda.com • Demo: illustrator key concepts, creating documents, the illustrator interface	Illustrator CS4 Essential Training: **Chapters 1, 2, 3**	
Week 2	• Demo: basic drawing, basic path editing, basic text editing, making selections • Work time	Illustrator CS4 Essential Training: **Chapters 4, 5, 6, 7**	
Week 3	• Demo: understanding appearances, working with groups and layers • Work time	Illustrator CS4 Essential Training: **Chapters 8, 9**	
Week 4	• Demo: working with color, object transformation and positioning • Work time	Illustrator CS4 Essential Training: **Chapters 10, 11**	**Illustrator Project 1:** Childhood Memory Book Cover
Week 5	• Demo: expressive drawing with brushes, using symbols • Work time	Illustrator CS4 Essential Training: **Chapters 12, 13**	
Week 6	• Demo: applying live effects, working with images • Work time	Illustrator CS4 Essential Training: **Chapters 14, 15**	
Week 7	• Demo: saving and printing, working with other programs • Work time	Illustrator CS4 Essential Training: **Chapters 16, 17, conclusion**	

Week 8	• **Midterm Project critique** • Demo: Flash – getting started, drawing • Work time	Flash CS4 Professional Essential Training: **Chapters 1, 2**	**Illustrator Project 2 - Midterm Project**: Logo & Package Design
Week 9	• **SPRING BREAK**		
Week 10	• Demo: working with text, working with symbols, working with the timeline • Work time	Flash CS4 Professional Essential Training: **Chapters 3, 4, 5**	
Week 11	• Demo: creating shape tweens, creating motion tweens • Work time • **Animation Discussion**	Flash CS4 Professional Essential Training: **Chapters 6, 7**	
Week 12	• Demo: using bitmap graphics, using sound • Work time	Flash CS4 Professional Essential Training: **Chapters 11, 12**	**Flash Project 1:** Bouncing Ball Interpretation
Week 13	• Demo: publishing and exporting flash content • Individual Meetings	Flash CS4 Professional Essential Training: **Chapter 16**	
Week 14	• Individual Meetings • Work time		
Week 15	• Work time		
Week 16	• **Final Project critique**		**Flash Project 2 - Final Project:** Animation & Portfolio