Computer Graphics
Course Foundation Syllabus

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DIGM 4177/5177 003
Course Syllabus | Fall 2003
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The Department of Technology
East Tennessee State University

Fall 2003
Course Description

Study of vector-based image and animation production with particular emphasis on postscript illustration and communication. Both technical and design considerations that work to improve the student's ability to communicate graphically will be addressed. The class features a combination of graphic production projects, critiques, readings and discussions. Lecture and laboratory.

Course Objectives

Working with Adobe Illustrator 10.0 and Flash MX, this production course prepares students for problem-solving and study in visual communication design. Practical classroom application will emphasize vector graphics concepts, techniques and terminology as well as encourage exploration of visual communication concepts and design principles. Topic highlights include designing with type, integration of type and image, innovative design creation, technical processes related to print production, transparency and masking techniques, combining raster images with vector images, and vector-based animation. Students can expect to learn basic theories of the relevant techniques available in vector-based image generation as well as apply these techniques to actual productions.

Upon successful completion of this course you will have:

A clear understanding of vector-based graphics and its role in the design process.
A thorough knowledge of terminology and technical aspects related to vector-based technology and production,
Gained experience with vector-based graphic applications and illustration techniques
A diverse skill set using a combination and variety of graphic packages,
Demonstrated knowledge on subject matter through completion of various projects,
Ability to offer both technical and aesthetic criticisms of the work of peers and self.

Required:

All handouts given over the course of the semester by the instructor.


Required: Several 100 or 250 MB Zip disks and/or CDs. Additional disks are strongly advised for back-ups.

Sketchbook

You will compile a sketchbook to be used for the pre-production process of your design concepts. Pre-production involves the planning stages of design. It is during the pre-production stage of the design process that basic visual decisions are made and potential conflicts resolved. Utilize your sketchbook to generate, and execute preliminary ideas, color studies and composition approaches. The sketchbook must be bounded (no loose leaf paper). In addition, collect ideas from examples of graphic design whose appearance coincides with what you are trying to communicate. Paste the examples to your sketchbook and include a brief commentary identifying the detail characteristics that you identify with why they are important and what they impart in the design.
During the course of the semester students will complete the following projects according to specific criteria, guidelines and instruction:

1. Corporate Identity
2. Newsletter (cover and spread)
3. Brochure
4. Advertising Campaign (series)
5. Final Project (to be determined)

There will be 3 major projects and several mini-assignments structured as basic design exercises. The projects will be graded and weighted according to their complexity.

Note: these assignments are preliminary and subject to change at any time, depending upon class progress and time frames.

In addition to attendance, the student’s final grade will be based entirely on the quality of their work. Projects will be graded upon specific criteria, which will be defined at the beginning of every assignment. Each assignment’s criteria will consist of five (5) elements each worth a maximum of up to 4 points. The sum of the value of each of the elements determines the project overall grade.

Graduate Students

Graduate students are required to contribute additionally to the class. If you are registered for DIGM-5177, the graduate section for this course, see me personally for further direction and details.

A student’s final grade will be determined by the collective number of points earned through each project and class attendance record. Final grades will be given according to the following scale:

<table>
<thead>
<tr>
<th>Grade Distribution</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Participation in Critique</td>
<td>10%</td>
</tr>
<tr>
<td>Finished Lesson Exercises</td>
<td>20%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Finished Projects</td>
<td>50%</td>
</tr>
</tbody>
</table>

A = 93-100  C' = 77-79  F = 0-59
A' = 90-92  C = 73-76  W = Withdrawal
B' = 87-89  C' = 70-72  WF = Withdrawal Failing
B = 83-86  D' = 67-69
B' = 80-82  D = 60-66

Note: No incompletes will be given for this course.

Late work will not be accepted under any conditions or circumstances. Any student who fails to complete and hand-in a project by the date and time it is due will receive a failing grade for that project….no exceptions.

A = Exceptional work: conceptually appropriate, demonstrates strong creative thought, precisely executed, instructions followed to the letter, and turned in on time.
B = Work executed with few errors, conceptually appropriate, demonstrates good creative thought, and turned in on time.
C = Average work, meets minimum requirements.
D = Below average work, sloppy, instructions not followed.
F = Failed to meet minimum requirements of the problem.

Attending class is required for success in this course. If a student cannot get to class on time each and every day in college, they will not keep a job in the industry. Realizing there are circumstances and situations beyond our control, the following policy will be in effect:

Absences: With the exception of critiques and due dates (which will be announced well in advance), a student is allowed to miss two (2) classes without detracting from the student’s final grade. Upon the third (3) absence, the student will suffer a full letter grade deduction on the final grade, unless the student provides a written excuse (which will be verified by the instructor). Upon the fourth (4) absence, the student will fail the course, regardless of the situation or their performance at said time.

Late Arrivals: If a student arrives late to class four (4) or more times during the course of the semester, the student will be charged with one absence. Arriving late six (6) times in the course of the semester the student will suffer a full letter grade deduction on the final grade. Upon the seventh (7) late arrival, the student will fail the course, regardless of their performance at said time.
Class Participation and Deadlines

Students are expected to participate in all critiques, class discussions, attend class, and complete assignments on time. Active participation in critiques will positively affect borderline grades.

Adherence to deadlines is expected. It is the individual student’s responsibility to keep track of the goals and deadlines and to present the work to the class and instructor on the specified dates. Work must be completed and ready to present before class on critique days. Work not ready for presentation at the beginning of critique is worth a maximum of 50% for the project. Work submitted more than one class day late will not receive a grade.

NOTE

Academic Misconduct

ETSU Policy No. 3.13, October 1, 1979:

“All students in attendance at East Tennessee State University are expected to be honorable.”

“Academic misconduct will be subject to disciplinary action. Any act of dishonesty in academic work constitutes academic misconduct. This includes plagiarism, the changing or falsifying of any academic documents or materials, cheating, and the giving or receiving of unauthorized aid in tests, examinations, or other assigned school work.

Penalties for academic misconduct will vary with the seriousness of the offense and may include, but are not limited to: a grade of “F” on the work in question, a grade of “F” for the course, reprimand, probation, suspension, and expulsion. For a second academic offense, the penalty is permanent expulsion.”

Class Policies

• Cheating will result in a 0 for the test/assignment and possible removal from class. This includes plagiarism and copyright infringement. Use of images or written material created by someone other than yourself must be used only in accordance with classroom assignment parameters, and must be attributed and/or permissions must be obtained.
• No surfing the internet during class unless it is necessary for a project.
• No non-class materials loaded into the computers.
• No disruptive behavior.
• Computers located in the labs are for educational purposes only.
• Leave cell phones off, or if needed for emergencies, on vibrate.

Special Accommodations

Students with disabilities should contact Disability Services to arrange for any special accommodations that may be required. Please notify your instructor.

Rules and Guidelines for ALL Digital Media Center Labs

Note: Upon first offense of any of the following rules, a faculty member or Graduate Assistant may ask you to leave the building. Upon second offense, your lab ID will be revoked resulting in a loss of after hours and weekend lab privileges.

• No food or drink in the lab.
• No chewing tobacco or tobacco products.
• Do not give out your ID card or a password to log onto the machines.
• Put all your files in F:/students/class#/your name. Any files in the wrong directory will be deleted. The /temp directory will be deleted on Saturdays. Files in the /students directory that are two weeks old will be cleared, so please back up all files you want to keep. Note: This is subject to change by the lab system administrator.
• Students are prohibited to install any software on any of the machines.
• Please do not change desktop settings or screen savers.
• Please do not ever turn a machine off.
• No pornographic or sexually explicit material viewed in the lab, or loaded onto computers or file server/sharing folders.
• Please promptly report any problem to your professor, graduate assistant and/or write the problem on the new problem report sheets taped to the top of each monitor.
## Course Outline

### General Outline of Topics
(Not necessarily in order and subject to change. If there is time, we will add a few more things to the schedule)

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Syllabus and survey review. Guided demonstration: A quick tour of Illustrator 10.0</th>
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<tbody>
<tr>
<td></td>
<td>Reading Assignment: Course book Lesson 1 pp 41-50</td>
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<tr>
<th>Week 2-4</th>
<th>Review</th>
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<tbody>
<tr>
<td>Lecture/discussion: Vector graphics and raster graphics; Illustrator’s Color Models; Guided demonstrations: Opening and saving files file formats basic shape tools copying and scaling transforming objects The pen tool drawing and editing curves applying and creating brushes applying color paint attributes</td>
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<tr>
<td>In Class Exercises</td>
<td></td>
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<tr>
<td>Design Basics Assignment: Four Squares</td>
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<tr>
<td>Reading Assignment</td>
<td>Handout: Principles of Two-Dimensional Design.</td>
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<tr>
<th>Week 5-7</th>
<th>Quiz #1</th>
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<tbody>
<tr>
<td>Lecture/discussion: Designing with Type; Guided demonstrations: Working with Type working with layers clipping paths and compound paths</td>
<td>Design Basics Assignment: Designing with Type</td>
</tr>
<tr>
<td>Design Basics Assignment: Blending shapes and colors appearance attributes and styles effects and transparency Design Basics Assignment: Typographic Portrait</td>
<td></td>
</tr>
<tr>
<td>In Class Exercises</td>
<td>Project 1 World Record Illustration</td>
</tr>
</tbody>
</table>

| Week 8-10       | Lecture/discussion: Print processes; Combining vector and bitmap images Guided demonstrations: Linking and placing files templates gradient meshes Masking techniques Drawing 3D objects | |
|                 | In Class Exercises Project 1 due; Critique Project 2 Stamp Design                |
### Week 11-13

**Quiz #2**

**Project 2 due; Critique**

**Project 3a & b Storyboard and animation project**

**Lecture/discussion:**
- Vector animation; Flash MX;
- Animation with Flash MX; Animation basics

**Guided demonstrations:**
- Animation with Illustrator layers
- Flash Interface
- Flash text and tools
- Timeline
- Frame rate
- Frame-by-frame vs. keyframe
- Onion skinning
- Shape tweening
- Shape hinting

**In Class Exercises**

- **Project 3a due**

### Week 14-15

**Guided demonstrations:**
- Symbols
- Instances
- Motion tweening
- Animating on a path
- Basic masking
- Animated masks
- Combining bitmaps and vectors

**In Class Exercises**

### Week 16

**Project 3b due; Final Critique**

*See Final exam schedule for final class meeting*

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### Other Resources


### Online Illustrator tutorials

- [http://graphicssoft.about.com/cs/illustratortuts/](http://graphicssoft.about.com/cs/illustratortuts/)
- [http://northlite.50megs.com/illus/index.htm#tips](http://northlite.50megs.com/illus/index.htm#tips)

### Bibliography for DIGM 4177 Computer Graphics