

Ellen Ault

Teaching Portfolio

Table of Contents

1. Teaching Philosophy
2. Teaching Responsibilities
3. Learning Philosophy
4. Evidence of Learning
5. Appendix
 - a. Texture II: Shading Networks Lesson Plan
 - b. Texture II: Shading Networks Term Project Description
 - c. Texture II: Shading Networks Term Project Rubric
 - d. #1-3: Student Sample of Texture II Term Project

Teaching Philosophy

Imagination is more important than knowledge. – Albert Einstein

I take pride in the education I deliver to students. I want the classes they take to be informative but also a place where they can enjoy creative freedom and expressionism. Students need to learn the content of a course, but more importantly how to take the concept to a new level that expresses their individuality. I want students to be open in the classes, encouraged to ask questions and to try new techniques. Along with educational concepts, I want students to be inspired to create new projects based off the lessons learned in class.

I utilize visual, auditory, and kinesthetic learning techniques so every type student will learn the material and discover a new use for it. In class we look at professional work, techniques, discussions, and critiques. Students learn how to critique others work and how to critique themselves. Students will discover problems a piece may have and improve upon it utilizing learned lessons and techniques. Good teaching environments last beyond the course, when the students take the concepts you have given them into future classes to drive their own artistic development.

I believe students learn best through practice and experimentation. For many projects and lessons, I have a three step process, each steps builds upon the previous one. These steps often overlap, building upon the learning experience.

The first step introduces the topic and discusses its purpose. During this explanation stage I have students interject why they believe the process is used and how it may help in their work. I include visuals to help introduce the topic, including a start and end result. This helps the students visualize what they will be creating and the benefits from it.

The second step includes a step by step tutorial of the topic at hand. Using a step by step approach, a complex action can be broken down into a simple method that is easier for the students to understand. With this type of tutorial procedure, all students end with the same result and an understanding of the topics use. The tutorial will reiterate and expand upon what was mentioned in the introduction. At this stage the task of repetition has been started to ensure the students remembering the information.

The final step involves the students applying what they just learned in the lesson. Usually called an in class exercise, I give the students a task to accomplish the lesson just covered. Here is where students are encouraged to experiment with the tools and processes to see what they can create. They can also ask questions on a one on one basis to help further explain something they may not have fully understood. In this step of working individually on the task, they have the option to be creative and have fun with the exercise. If the student enjoys what they are doing, they are more likely to remember what they are creating.

I also find many students help each other during this time, which reinforces the learning twofold. First, a student finds a way to break the information down to explain it to the other student. Second, during this explanation they are strengthening their own learning to help themselves remember the tools and task. This can occur during the in class exercises, group themed projects, and/or homework assignments.

Utilizing repetition and multiple learning techniques will ensure the knowledge presented in class will be absorbed and retained for future use. A learning environment that engages the student and allows artistic expression will lead to positive learning results.

Teaching Responsibilities

Art Institute of Tampa Tampa, FL 2007 - present

Full Time faculty member in Media Arts and Animation department. Participate in quarterly portfolio reviews, hold weekly modeling software sessions and member of faculty development committee. In 3D specific classes, teach dual software techniques in Autodesk 3D Studio Max and Maya where applicable.

Courses taught at The Art Institute of Tampa:

- Texture I: Materials and Lighting
- Texture II: Shading Networks
- Computer Modeling I
- Low Polygon Modeling & Animation
- Computer Modeling II
- Animation I: Performance
- History of Animation
- Character Rigging
- Introduction to 3D Animation
- Animation II: Expression
- Computer Modeling III

The following classes I renovated the curriculum:

- Animation I: Performance
 - Introduced a team building midterm animation, where students animations blend together to create one long animation sequence.
- History of Animation
 - Altered curriculum to American Animation, researching in depth of the American Animation studio, styles and trends.

- Character Rigging
 - Introduced teaching Character Rigging in dual programs, for students to learn two program techniques in one course.
- Introduction to 3D Animation
 - Simplified a course term project into four separate animation projects for students to concentrate more on animating elements and learning software.
- Animation II: Expression
 - Simplified a course term character biped and lip sync animation project into a solely head lip sync animation project. Students are able to concentrate more on the form of facial expression and creating emotions.
- Computer Modeling III
 - Took the current modeling projects of skull, façade, and exploded object and integrated those projects into other classes for consistent learning outcomes. Working from the skull and façade project, developed a term project where students model an animal in an environment. Students completed a more cohesive modeling project for presentation.

Art Institute of Pittsburgh – Online Division 2007 - present

Part time faculty member as an online instructor. Required to log in to online classroom 5 of 7 days a week without missing two consecutive days, to critique and evaluate student work.

Classes taught at The Art Institute Online:

- History of Animation
- Drawings and Anatomies
- Storyboard Rendering for Animation
- Life Drawing for Animation
- Drawing

Digital Media Arts College Boca Raton, FL 2005 - 2007

Part time faculty member of Graduate Department. Taught small size classes in Special Effects Animation and Graphic Design graduate departments. Member of Thesis Committee, in charge of Motion Capture Studio, and assisted in student scheduling.

Classes taught at Digital Media Arts College:

- Prerequisite Introduction to 3D Animation
- Prerequisite Introduction to 3D Modeling
- Character Animation
- Motion Capture
- History of Animation
- Design Concepts and Procedures
- Thesis Research
- Thesis II
- Design Management
- Graduate Theory and Criticism
- Exhibition Design
- Digital Texturing and Painting

The following classes I renovated the curriculum:

- Graduate Theory and Criticism
 - Renovated curriculum to include written documents as well as visual projects based on lectures and animation theories to entice students to take lessons further into their projects.
- Exhibition Design
 - Renovated curriculum to introduce 3D elements to the graphic design students, having them learn the basics of computer three dimensional space to integrate with their two dimensional designs.

The following classes I developed the curriculum:

- Prerequisite - Digital Texturing and Painting
 - Developed semester long course to introduce the basics of texturing. Students learned Photoshop painting elements, unwrapping of three dimensional characters, and integration between the 3D Maya software with Adobe Photoshop.

Exhibitions:

Tampa Artist Emporium. December 2009 - present

Making Strides. Cause an Effect. Tampa Museum of Art. Tampa, FL April 2010

Soey Stitch. Munny: Change is Everything. Skatepark of Tampa, Tampa, FL February 2010.

Penguin, Reindeer, Tree. Winter Wonderland. Tampa Artist Emporium, Tampa, FL December 2009.

Gotcha Family. Mortal Plush: I am Not Your Toy. Art Whino Gallery, Washington D.C. July 2009.

Student Body. Faculty Show. Art Institute of Tampa Gallery, Tampa, FL. July 2009.

Stitched Palm. Faculty Show. Art Institute of Tampa Gallery, Tampa, FL. July 2008.

Awards:

2010 Silver Medal, "Snowbirding." Made Up Category, Schmancy Plush You Olympics

2010 Skatepark of Tampa Top Choice, "Soey Stitch." Munny Change is Everything

2008 Fall Full Time Instructor of the Quarter

Professional Development:

How to Leave Your Students Begging for More! September 2008

Critical Thinking, April 2008

The Art of Teaching at Ai, November 2007

EDMC Educational Leadership Courses:

Essentials of Leadership, August 2008

Communication and Listening, August 2009

Making Effective Decisions, September 2009

Learning Philosophy

Students can learn through auditory, visual, and/or kinesthetic techniques. Applying these techniques in classes, students learn and practice a new skill or tool set in class. The student can then experiment with the tool to create their version of a selected assignment. Through the repetition and experimentation process students learn the lessons, but more importantly learn how to integrate the lesson in to an artistic project. The integration can be seen in their in class work, their major term projects, and in work for other classes.

For the auditory learners, classes begin with an introduction that discusses the lesson or project on hand. The discussion can engage the students in the class, thinking about the purpose of the task and its implementation. This explanation will assist the student's comprehension of the assignment and will guide the students through the rest of the class time. This will keep them as an active listener throughout the class, to see how the lesson is integrated into their class projects.

For the visual learners, a majority of the class time is spent visually demonstrating a lesson with the students watching the task and following along. These demonstrations may be through a video discussing part of the lesson or from a book giving information on how to complete a task. Teaching step by step will let the visual learners see an assignment broken down into a production, to fully understand how the assignment is created and implemented. Often a student may be apprehensive of not being able to create the final result. However, once the students see the process taken to reach the final product, many fears disappear and allow the student to complete sections at a time. Having multiple small sections to complete can result in a stronger final piece. Seeing the steps allows the visual learner to adapt the lesson to their own project.

In the last portion of a class, the kinesthetic learning technique is executed. Students are given a small assignment to apply the material they learned in the lesson. At this portion of the class, students are hands on completing a task that repeats the lesson information and production process. Through this repetition of the material, students will remember the production steps previously implemented. The repetition of this small task will help guide the student in their larger project outside of class.

During this kinesthetic learning time, many students will refer to the visual auditory aspects of the lesson, helping create a full understanding of the topic. Students can ask for further instruction and explanation of the topic during this time, as well as assist their fellow students.

Evidence of Learning

The goal of teaching is for students to retain the information received and utilize it for their own projects. Students need to learn new techniques and find their own methods to interpret the material. To ensure the effectiveness of my teaching, I assess students learning of the material in weekly exercises, project progression, and final outcomes.

In each class session, new material or a continual lesson from the previous week, will be discussed and practiced. To ensure the students learning of the material I give small exercises for the students to complete during class time and to hand in by the end of the session. Referring to Appendix A, the lesson plan for week one of Texture II demonstrates the process of a typical class. This class is an advanced texturing class, but first concepts are reviewed from the prerequisite before pushing forward. After the review of previous materials and the introductions of new techniques, students are given time to explore the concept further.

At the end of the class, these small exercises are reviewed to see the comprehension of the lessons by the class as a whole, and which sections may need further instruction or review. Using this weekly assessment method I can ensure students are learning tasks and finding ways to implement them into their own work.

For studio driven classes where the overall assessment is based off of project work, project progression assessments are included during the course to ensure the student is completing the project and reaching its outcomes. Please see Appendix B, the Term Project Description. The project progressions will take the broad assignment and break it into sections the student needs to complete in a particular order to finish the project. These assessments can range from once a week to every few weeks based on the length of the project. These

progressions give the students an outline form to follow so they can learn proper techniques and frameworks when creating the project on their own time. The progressions assess the student's work on the project based off of a small set of goals in steps instead of one large piece. This reinforces the students understanding of specific tasks that are needed to complete the finished project and give the students time to improve upon their work if needed.

For the final learning assessment of a course, a comparison is made between the finished student projects and the original course outcomes. The students receive a grading rubric for the final project weeks in advance, sometimes during the first week of the course. Please see Appendix C, the Term Project Rubric. This rubric includes a breakdown of how their final project will be evaluated and graded. It will list in detail, sections of the project that need to be completed and the quality level of work. These rubrics are utilized to assess the weekly lessons the student learns and how the student integrates the lessons into the final project. The final rubric will reinforce the original learning outcomes of the course which the student is to accomplish.

In addition to the final rubric, the course and teaching methods utilized are evaluated on the class as a whole. To ensure the course outcomes are achieved, the final project submissions are reviewed. If a particular section is lacking in the group as a whole, those lessons and teaching methods will be improved for the next course. A short anonymous survey is also given to the students, having them evaluate the course and methods of learning. These surveys have the firsthand accounts of the student's opinions to benefit the learning of future students in the course.

Appendix D collection is a sample of the completed Texture II term project in progression by student Angel Duarte. Mr. Duarte decided to create an alien exterior environment. He followed the outline from the term project description outline. (Appendix B) In Appendix D - 1 he began with multiple concept art sketches to create separate elements that were important to his overall concept. To create the composition he worked in the main elements in a progression to build the final composition. He also included a simplified image of the color and lighting setup to create the mood and tone of the piece.

In Appendix D – 2, you can see his progression from the concept art to the finished 3D piece, as described by Mr. Duarte. Again following the term project description outline, Mr. Duarte began with the geometry for the piece. His modeling is organic yet simple in nature, to ease the texturing process. After he set the finished camera angle, he continued with the unwrapping of the objects to prepare for texturing. Textures were then created utilizing Photoshop and 3DS Max. Throughout the progression of his project, elements from the class lessons are integrated into the project such as fog, volume lighting, hair modifier, alpha maps, and mental ray rendering. In his description, we can see Mr. Duarte struggled combining some of the elements, but was able to develop a solution that fit his project.

Finally, in Appendix D -3, we can view Mr. Duarte's completed texturing project. The finished image contains the outcomes of the texturing class, to create a portfolio worthy piece showing exemplary texturing skills. His final piece shows a variety of advanced texturing techniques such as advanced lighting, mental ray rendering, and shading networks. His final piece shows a comprehension of control and understanding of texturing.

Appendix A: Texture II: Shading Networks – Week 1 Lesson Plan

Course Competency taken from syllabus:

1. Understand the importance of organization, focus, and concept as part of the design process for a richly-realized texture project.

Learning Objectives:

1. Have an understanding of what the course requirements and goals are.
2. Review the basics of the Material Editor and the UVW Unwrapping.

Support Materials:

1. Web link and document of “Return to the Light”
2. Character File to unwrap
3. Copies of Syllabi, breakdown of Texture homework’s, breakdown of Final project

Advance Organizer: 30 min

1. Introduce course and discuss syllabus, projects, grading and requirements

Lesson Plan

1. Discuss final project in detail 45 min
 - a. Discuss final project requirements and deadlines
 - b. Show and describe web breakdown of Return to the Light
 - c. Discuss possible student ideas and write list on board
2. Break 15 min
3. Review Texture I Concepts 30 min
 - a. Review Material Editor and Hypershade
 - b. Review material surface alterations: Bump Map, Alpha Map, Specular Map
 - c. Review UVW Unwrapping and UVW Template
4. Class Exercise #1: Unwrap and Photoshop Texture Girl model 2 hrs
 - a. Unwrap Girl model in Studio Max or Maya. Create UV template.
 - b. In Photoshop create a texture for the model.

- c. Apply the new texture to the girl model.
- d. Turn in UV template and render shot of girl with texture applied.

Assessment:

Formal (Graded):

- Class Exercise # 1 – Unwrap Girl Model and Apply Photoshop Texture

In Formal (Observation - Not Graded):

- Understanding of presented materials
- Use of 3D Studio Max and Maya
- Interaction and participation in class

Homework:

1. Texture Tutorial #1 – due week 2
2. Final Project Concept Art – due week 3

Appendix B: Texture II: Shading Networks – Term Project Description

Each student will create one quarter long project of an exterior scene. Think of this piece as an addition to your portfolio. Save copies of your progress to show how you started with concept art, built the models, created the textures, and produced the finished piece. Employers love to see the progress and decisions you made in creating work.

Examples of the exterior scene include but are not limited to: ruins, jungles, marinas, castles, graveyards, porches, etc. Student must present concept art for approval of final project. The exterior scene has no limit of objects, but must contain many texture possibilities. Modeling can be very simple and have a low poly count. This is not a modeling class. The main goal is to create a scene that looks lived in due to its composition, textures, and lighting.

Every texture must be created by hand. No stolen images from websites! If you have a photo, you must prove you took the photo yourself and did not download it from a website.

During the semester, there will be four progress checks graded separately from the final project:

Research/Concept Art: Student must produce five pages of concept art. Minimum size 8.5” x 11”. Students may use traditional methods or computers. At least one page must contain the color scheme and lighting. Student will present the concept art to the class.

Geometry: Student must have completed the geometry for the exterior scene. Remember this is not a modeling class. Student can create simple, low polygon models for the project. Student will present the geometry to the class. Student must have a chosen camera angle included with the scene.

UV Mapping: All objects in the scene must be UV mapped or UV unwrapped, depending upon the complexity of the shape and textures used for the objects.

Textures: All handmade textures for the final project must be turned in. Textures must be clearly labeled as to what surface they will be covering. Level of detail of textures will be noted. If used a procedural texture from max, make a screen shot of the material network.

Final Project: Student will present entire project and process to the class.

Upon week 11 students must hand in the final project on CD/DVD including all max files used, all textures used, concept art, finished renders, and digital copies of the completed pdfs handed in.

Student must hand in at least three color pdf printouts on 11" x 17" ready for their portfolio.

Sheets must contain student name, project title, class name, and term date.

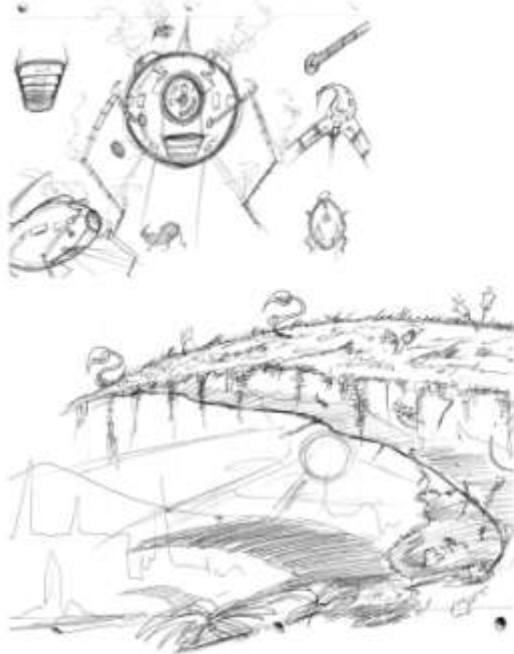
- Sheet #1: Selection of Concept Art
- Sheet #2: Progress shots – how you created textures, models, composition, etc to show your creative process
- Sheet #3: Finished rendered scene from the chosen camera angle.

Appendix C: Texture II: Shading Networks – Term Project Rubric

| | Excellent (5) | Good (4) | Average (3) | Fair(2) | Unacceptable(1) |
|----------------------------------|--|---|---|---|---|
| Final Guidelines | Fulfilled expectations, 3 color prints, labeling, and disc with all files at time of class start. | Disc and 3 prints, but no labeling, correct size and/or color. | Disc of files, but no prints. | Files on drop off, no prints or CD | Project not submitted. |
| Description of Project | Excellent presentation and description of project, described entire process of creating project, difficulties, areas proud of, need for improvement, etc. | Described project process and layout, but not if difficulties were involved or questions about room for improvement. | Short description of project. | Explained project with out confidence, very short description. | Very weak description of project and was not prepared to explain project. |
| Composition | Three prints are cohesive, clean layout showing work and process, clear lighting, eye moves throughout composition. | Well balanced composition of main elements in scene, but weak composition on prints. Images randomly placed, not properly showing work. | Unbalanced composition of scene, images random placement of images on prints. | Folder of rendered stills and concept art, no composition. | Project not submitted. |
| Textures | Project completed with all custom textures from Photoshop. Dynamic shading networks used with advanced material nodes. | Project completed with all custom textures from Photoshop. Materials go beyond the 'standard' blinn material. | Project has custom bitmaps textures combined with procedural materials. | Project has simple procedural textures and/or solid color bitmaps from Photoshop. | Project not textured. |
| UV Mapping | Clean UV's, materials do not stretch, seams hidden from view | Clean UV's and materials do not stretch, but seams are visible on models. | UV's applied to objects, but seams present, textures stretch | No naming, weak materials. UV's not complete. | UV information not present. |
| Lighting | Advanced lighting effects used such as skylight, atmospheric effects, and/or volume lights. Crisp shadows in scene . | Lighting setup in scene with crisp shadows giving direct light source. | Lighting and shadows used in scene, no direct light source. | Lighting in scene, no shadows present. | Default lighting present in scene. |
| Participation in Critique | Participated in asking and answering questions to fellow students, challenged points, created relationships between ideas, giving new ideas on how to accomplish task. | Participated in commenting to other students, gave a few ideas on how to improve. | Made a few comments such as "I like it" but did not expand in detail or explaining reasons. | Appeared to pay attention to others presenting, but did not participate. | Did not participate in critique or commenting on other student work. Did not pay attention. |

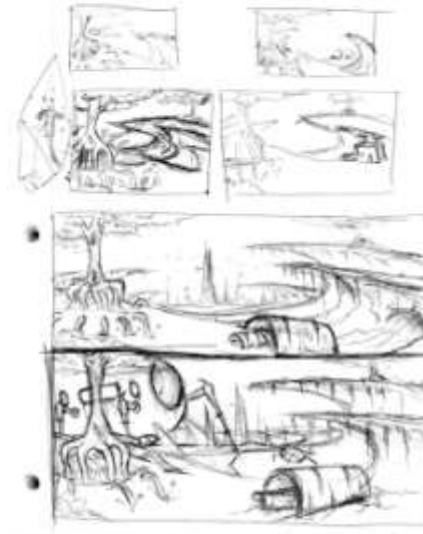
Appendix D - 1: Texture II: Shading Networks – Student Sample Term Project

Initial Concept Art - Main Elements

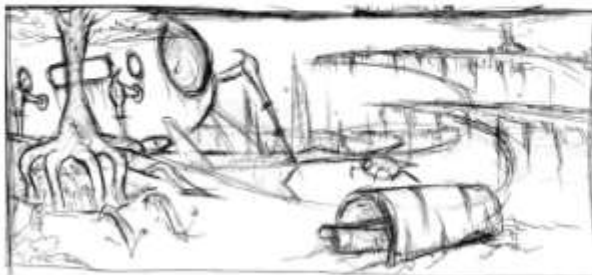


Angel Duarte
Texture II: Shading Networks
Term Project - Concept Art

Concept Art - Progression of Main Elements



Concept Art - Final Composition



Concept Art - Color and Lighting Mood



Appendix D - 2: Texture II: Shading Networks – Student Sample Term Project

Angel Duarte
Texture II: Shading Networks
Term Project - Scene Progression



First I started out with the most important object based on my concept.



Next, I added some detail to my object. In this case, it was just careful extruding and creasing the right lines. Wasn't as easy as it sounds.



Finally, I gave the robot a more organic body with a free-form deformer, and made its legs by shift + dragging edges out.



The rest is simple. Spline extrudes for the tree. Shell for the can. Spline + surface for the ground, etc.

Next I wanted to establish the idea I had for lighting. Some fog was created, too, and I instantly likened toward the mysterious effect it gave.

I lit the scene a little better, with an orange tint, for a warm shot. I also created a craptastic background for placement.

I made the background a little more presentable, lit the scene evenly, and unwrapped all of my objects so I could start texturing.

After creating textures in photoshop, I added them to my objects. When switching to mental-ray, my alpha-maps were altered, and seemed to reflect something.



I continued with my alpha-maps, hoping the problem would fix itself. And I added a hair modifier for grass.

I toyed with the placement of the mecha, but didn't keep it. I also finalized the mecha's UV's here.

Added back lights, volume lights (for the mecha's search-lights), and ditched my problematic alpha's. The glow I also applied in this step didn't show through the alpha maps.

Finalized the background image. Toyed with the lighting. The hair modifier had long since failed me and crashed 3DS max more than once so I did away with it for good.

I ran touch-ups in Photoshop CS#. Added lighting effects, noise, the alpha's, and made my own 2D grass. Signed and finished!

Appendix D - 3: Texture II: Shading Networks – Student Sample Term Project

