

LESSON PLAN

Instructor Name: Shannon Gilley

Course Title: Materials and Lighting

Course Number: CA3425

Week: 1

Day: 2

Quarter: W114

Course Competency (Taken from Syllabi)	Introduced	Continued	Completed
Correlate real light with the computer rendition of light	Week 1 Session A	Week 1 Session B	Week 2 Session B
Apply the principles of lighting in computer animation	Week 1 Session B	Week 2 Session A	Week 2 Session B

Learning Objectives (links to the course competency)

Upon completion of this lesson, the student should be able to: Understand aspects of how light behaves in the real world.

Upon completion of this lesson, the student should be able to: Understand how photographers use light to present products in an appealing fashion.

Upon completion of this lesson, the student should be able to: Apply strategies in a 3D environment to simulate real-world light behavior, as well as photography studio lighting.

Support Materials:

(Instructor materials or student materials such as handouts, supplies needed for instruction, etc)

Students will need their hard-surface models from their previous Intermediate 3D Modeling course.

Web case-study "Lighting in 3-Part Harmony"

During class, a live demonstration will be recorded for students' future reference.

Lesson Plan Outline	Time Frame
<p>Advance Organizer: (Information presented before a lesson begins to bridge prior learning to new concepts. Examples include questions on the board, quotes, diagrams and visuals.) Show a photo of a product shot in a studio environment. Question on whiteboard: How did the photographer use light to “style” the product in the studio?</p>	5 min
<p>Instructional Methods: Instructor will facilitate a discussion of purposes of using light in a photography studio as well as controllable properties of light. Instructor and students will generate lists of purposes and properties on the whiteboard, and then link items between lists to indicate which properties of light are most useful in achieving each purpose. Instructor will also go through a studio lighting case-study with the students.</p>	20 min
<p>Demonstrations by Instructor: Instructor will give a live software demonstration in creating a studio lighting scheme in 3D, which will be recorded for the students’ reference. Students must have their completed hard-surface models from their Intermediate 3D Modeling course.</p>	40 min
<p>Learning Activities for Students: Students participate in discussion and follow along with instructor in creating a 3D studio lighting scheme.</p>	Simultaneous with instructor demo
<p>Assessment: Instructor gallery walk to briefly assess each student’s implementation of studio lighting in the 3D environment.</p>	10 min
<p>Homework/Assignments: Having created a starting point for their studio lighting schemes, students will refine their lighting to improve overall rendering quality</p>	Remainder of class time + outside of class
<p>Summary Activity for the Learning Objectives for the Day: (A reminder or closing activity of what has been learned for the class period) Review purposes of light and controllable qualities of light, and informally quiz students on the links between them.</p>	5 min
<p>Notes:</p>	