

Washtenaw Community College Comprehensive Report

ANI 155 Textures and Studio Lighting for Animation Effective Term: Winter 2018

Course Cover

Division: Business and Computer Technologies

Department: Digital Media Arts

Discipline: Animation

Course Number: 155

Org Number: 14500

Full Course Title: Textures and Studio Lighting for Animation

Transcript Title: Textures & Studio Lighting Ani

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: Course Change

Change Information:

Course description

Outcomes/Assessment

Objectives/Evaluation

Rationale: Discovered that during the assessment process, one of the outcomes needed a different assessment tool.

Proposed Start Semester: Winter 2018

Course Description: In this course, students will use industry standard software to texture 3D models. Students will learn to create virtual lighting setups and cameras. Common and advanced software rendering engines will also be explored.

Course Credit Hours

Variable hours: No

Credits: 4

Lecture Hours: Instructor: 60 **Student:** 60

Lab: Instructor: 0 **Student:** 0

Clinical: Instructor: 0 **Student:** 0

Other: Instructor: 30 **Student:** 30

Total Contact Hours: Instructor: 90 **Student:** 90

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

No Level Required

Requisites

General Education

General Education Area 7 - Computer and Information Literacy

Assoc in Arts - Comp Lit

Assoc in Applied Sci - Comp Lit

Assoc in Science - Comp Lit

Request Course Transfer

Proposed For:

College for Creative Studies

Eastern Michigan University

Ferris State University

Jackson Community College

Kendall School of Design (Ferris)

Michigan State University

Student Learning Outcomes

1. Texture 3D models using industry standard software.

Assessment 1

Assessment Tool: Portfolio review

Assessment Date: Spring/Summer 2017

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 70% or more of students must score 70% or higher

Who will score and analyze the data: Departmental faculty

2. Create appropriate virtual lighting setups.

Assessment 1

Assessment Tool: Portfolio review

Assessment Date: Spring/Summer 2017

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 70% or more of students must score 70% or higher

Who will score and analyze the data: Departmental faculty

3. Create imagery using industry standard software rendering engines.

Assessment 1

Assessment Tool: Examination questions

Assessment Date: Spring/Summer 2017

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer Key

Standard of success to be used for this assessment: 70% or more of students must score 70% or higher

Who will score and analyze the data: Departmental faculty

4. Create and use virtual cameras.

Assessment 1

Assessment Tool: Portfolio review

Assessment Date: Spring/Summer 2017

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 70% or more of students must score 70% or higher

Who will score and analyze the data: Departmental faculty

Course Objectives

1. Perform UV layouts.
2. Identify the types of virtual lights and their uses.
3. Manipulate common software rendering engines to simulate advanced lighting effects.
4. Identify appropriate image types for production.
5. Use the appropriate controls to manipulate NURBS textures.
6. Create bump and normal maps.
7. Use industry standard software to create texture maps.
8. Create texture networks that are appropriately complex.
9. Manipulate, animate, and adjust virtual cameras.
10. Manipulate and troubleshoot various software rendering engines.
11. Identify and differentiate between various color spaces.
12. Use raytracing to simulate reflections, refractions, and raytraced shadows.
13. Identify key raytracing concepts.
14. Create imagery using global illumination.
15. Articulate the physics of real light.
16. Identify basic types of shading models.
17. Manipulate photon systems to produce indirect lighting effects.
18. Create scenes lit by environmental lighting setups.
19. Differentiate between the needs of real-time and pre-rendered textures.
20. Bake shadows and lighting effects.

New Resources for Course

Course Textbooks/Resources

- Textbooks
- Manuals
- Periodicals
- Software

Equipment/Facilities

Level III classroom

Reviewer

Action

Date

Faculty Preparer:

Randy Van Wagnen

Faculty Preparer

Aug 02, 2017

Department Chair/Area Director:

Ingrid Ankerson

Recommend Approval

Aug 03, 2017

Dean:

Eva Samulski

Recommend Approval

Aug 04, 2017

Curriculum Committee Chair:

Lisa Veasey

Recommend Approval

Oct 17, 2017

Assessment Committee Chair:

Michelle Garey

Recommend Approval

Oct 18, 2017

Vice President for Instruction:

Kimberly Hurns

Approve

Oct 25, 2017