Washtenaw Community College Comprehensive Report

ANI 150 3D Modeling & Production Pipeline
Effective Term: Winter 2020

Course Cover
Division: Business and Computer Technologies
Department: Digital Media Arts (new)
Discipline: Animation
Course Number: 150
Org Number: 14500
Full Course Title: 3D Modeling & Production Pipeline
Transcript Title: 3D Modeling & Prod. Pipeline
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 title
 Course description
 Outcomes/Assessment
 Objectives/Evaluation
 Other:
Rationale: While ANI 150 still emphasizes 3D modeling, it also introduces students to the rest of the production pipeline. The master syllabus and course title should reflect that more clearly. An additional rationale on the title change is that the Roman numeral naming convention doesn't consistently continue throughout the rest of the 3D Animation program course titles.
Proposed Start Semester: Winter 2020
Course Description: In this course, students will create custom digital 3D models and explore the 3D production pipeline from modeling to finished rendered imagery. A variety of modeling techniques and tools for both polygonal and NURBS modeling will be covered. Additionally, students will be introduced to texturing, lighting, animation, and rendering. Using professional industry-standard software, students will learn industry-specific vocabulary. The title of this course was previously Animation I: Modeling.

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:

Student Learning Outcomes

1. Select and use appropriate tools and techniques to create digital 3D models using industry-standard software.
   Assessment 1
   Assessment Tool: Responses to relevant exam questions
   Assessment Date: Spring/Summer 2022
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All students
   How the assessment will be scored: Exam answer key
   Standard of success to be used for this assessment: 70% of students will score an average of 70% or higher on the relevant exam questions.
   Who will score and analyze the data: Departmental faculty
   Assessment 2
   Assessment Tool: Department review of project
   Assessment Date: Spring/Summer 2022
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: Random sample of 50% of students in all sections, up to a maximum of 25
   How the assessment will be scored: Departmentally-developed rubric
   Standard of success to be used for this assessment: 70% of students will score an average of 70% or higher on the project.
   Who will score and analyze the data: Departmental faculty

2. Apply 3D pipeline knowledge and techniques including texturing, lighting, animation, and rendering at a basic level.
   Assessment 1
   Assessment Tool: Responses to relevant exam questions
   Assessment Date: Spring/Summer 2022
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: Random sample of 50% of students in all sections, up to a maximum of 25
   How the assessment will be scored: Exam answer key
   Standard of success to be used for this assessment: 70% of students will score an average of 70% or higher on the relevant exam questions.
   Who will score and analyze the data: Departmental faculty

Assessment 2
Assessment Tool: Department review of project
Assessment Date: Spring/Summer 2022
Assessment Cycle: Every Three Years
Course section(s)/other population: All
Number students to be assessed: Random sample of 50% of students in all sections, up to a maximum of 25
How the assessment will be scored: Departmentally-developed rubric
Standard of success to be used for this assessment: 70% of students will score an average of 70% or higher on the project.
Who will score and analyze the data: Departmental faculty

3. Identify 3D industry and 3D software terminology.
   Assessment 1
   Assessment Tool: Responses to relevant exam questions
   Assessment Date: Spring/Summer 2022
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All students
   How the assessment will be scored: Exam answer key
   Standard of success to be used for this assessment: 70% of students will score an average of 70% or higher on the relevant exam questions.
   Who will score and analyze the data: Departmental faculty

Course Objectives
1. Construct 3D objects using polygon modeling tools.
2. Construct 3D objects using NURBS modeling tools.
3. Select and apply modeling tools appropriate for specific needs and situations.
4. Create and assign basic shaders and textures to 3D models.
5. Apply virtual lighting to 3D models.
6. Control new and existing virtual cameras.
7. Set and adjust animated keyframes.
8. Set up basic render settings and launch renders.
9. Identify and properly use 3D industry and 3D software terminology.

New Resources for Course

Course Textbooks/Resources
Textbooks
Manuals
Periodicals
Software

Equipment/Facilities
Level III classroom
Computer workstations/lab
Data projector/computer

Reviewer	Action	Date
Faculty Preparer:		
Kevin Bindschadler	*Faculty Preparer*	*Aug 15, 2019*
Department Chair/Area Director:		
Ingrid Ankerson	*Recommend Approval*	*Aug 17, 2019*

Dean:

Eva Samulski   *Recommend Approval*   *Aug 19, 2019*

Curriculum Committee Chair:

Lisa Veasey   *Recommend Approval*   *Sep 14, 2019*

Assessment Committee Chair:

Shawn Deron   *Recommend Approval*   *Sep 20, 2019*

Vice President for Instruction:

Kimberly Hurns   *Approve*   *Sep 26, 2019*