ANI 150: 3D MODELING & PRODUCTION PIPELINE

Completed Workflow

1. C&A Office (sabird@wccnet.edu; aabooker@wccnet.edu; cacevans@wccnet.edu; kgwu@wccnet.edu; bjlinford@wccnet.edu)
2. Vice President for Instruction (hbhirth@wccnet.edu; brtucker@wccnet.edu)
3. Banner (cacevans@wccnet.edu)

Approval Path

1. 2026-03-17T18:59:54Z
   Sera Bird (sabird): Approved for C&A Office
2. 2026-03-17T19:47:01Z
   Brandon Tucker (brtucker): Approved for Vice President for Instruction
3. 2026-03-26T07:03:12Z
   Approved for Banner

History

1. Mar 26, 2026 by Sera Bird (sabird)

Viewing: ANI 150 : 3D Modeling & Production Pipeline

Changes proposed by: Sera Bird (sabird)

Effective Term

Summer 2026

Rationale and proposal summary

Updating objectives to reflect changes in industry standard workflows

Course Cover

Full Course Title

3D Modeling & Production Pipeline

Transcript Title

3D Modeling & Prod. Pipeline

Subject Code

ANI - Animation

Course Number

150

Department

Digital Media Arts Dept (DMAD)

Banner Division

BCT

Division/College

Business/Computer Technologies (BC)

Org Code

14500

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.

Has this course been approved for virtual or blended virtual?

Yes

Has this course been approved for online or online blended?
Yes

Grading method
Standard Letter, Audit, Academic Forgiveness

CIP Code
119999 - Computer and Information Sciences and Support Services, Other.

Occupational Indicator
Yes

ACS Code
120

Credit hours, contact hours, repeatability

Repeatable for additional credit
No

Course credits
4

Lecture contact hours
60

Other Contact hours
30

Are any of these clinical hours?
No

Total Contact Hours
90

Prerequisites and prerequisite skill levels

College-Level Math
No Level Required

College-Level Reading and Writing
College-level Reading and Writing

Approved Level I Prerequisite:
Academic Reading and Writing Levels of 6

Course Assessment Plan
Learning Outcome

Outcome
Select and use appropriate tools and techniques to create digital 3D models using industry-standard software.

Assessment #1

Assessment Tool
Outcome-related exam questions

Anticipated Next Assessment Year
2026

Anticipated Next Assessment Term
Winter

Assessment Cycle
Every Three Years

Anticipated assessment population
All students from all sections

How the assessment will be scored
Answer key

Who does the scoring?
Departmental faculty

Standard of success
70% of students will score 70% or higher.

Assessment #2

Assessment Tool
Outcome-related project rubric area(s)

Anticipated Next Assessment Year
2026

Anticipated Next Assessment Term
Winter

Assessment cycle
Every Three Years

Anticipated assessment population
Other

If not including all students from all sections, please provide an estimation of how many students will be included (percentage and estimated number), and how you're planning to ensure representation for all schedule types, delivery methods, full-time and part-time students, all instructors, etc.
All sections; Random sample of all students, with a minimum of 25 students

How the assessment will be scored
Departmentally-developed rubric

Who does the scoring?
Departmental faculty

Standard of Success
70% of students will score 70% or higher.

Assessment #3

Learning Outcome

Outcome
Apply 3D pipeline knowledge and techniques including texturing, lighting, animation, and rendering at a basic level.

Assessment #1

Assessment Tool
Outcome-related exam questions

Anticipated Next Assessment Year
2026

Anticipated Next Assessment Term
Winter

Assessment Cycle
Every Three Years

Anticipated assessment population
All students from all sections

How the assessment will be scored
Answer key

Who does the scoring?
Departmental faculty

Standard of success
70% of students will score 70% or higher.

Assessment #2

Assessment Tool
Outcome-related project rubric area(s)

Anticipated Next Assessment Year
2026

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Winter

Assessment cycle
Every Three Years

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If not including all students from all sections, please provide an estimation of how many students will be included (percentage and estimated number), and how you're planning to ensure representation for all schedule types, delivery methods, full-time and part-time students, all instructors, etc.
All sections; Random sample of all students, with a minimum of 25 students

How the assessment will be scored
Departmentally-developed rubric

Who does the scoring?
Departmental faculty

Standard of Success
70% of students will score 70% or higher.

Assessment #3

Learning Outcome

Outcome
Identify 3D industry and 3D software terminology.

Assessment #1

Assessment Tool
Outcome-related exam questions

Anticipated Next Assessment Year
2026

Anticipated Next Assessment Term
Winter

Assessment Cycle
Every Three Years

Anticipated assessment population
All students from all sections

How the assessment will be scored
Answer key

Who does the scoring?
Departmental faculty

Standard of success
70% of students will score 70% or higher.

Assessment #2

Course Objectives

	Objective(s)
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.
10.	Identify and describe the process of retopologizing a model.
11.	Utilize retopology tools and techniques.

General Education Area(s)

Area 1: Writing
No

Area 2: 2nd Writing or Communication/Speech
No

Area 3: Mathematics
No

Area 4: Natural Science
No

Area 5: Social and Behavioral Science
No

Area 6: Arts and Humanities
No

MTA General Education
No

Review

Is conditional approval requested?
No

Is this course currently conditionally approved, and you are now submitting it for full approval?
No

Key: 170

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
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Assessment 2

Assessment Tool: Department review of project
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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
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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*