ART232 : Intermediate 3-D Hard Surface Design

General Information

Author:	• Roger Dickes
Course Code (CB01) :	ART232
Course Title (CB02) :	Intermediate 3-D Hard Surface Design
Department:	ART
Proposal Start:	Spring 2025
TOP Code (CB03) :	(0614.40) Animation
CIP Code:	(10.0304) Animation, Interactive Technology, Video Graphics, and Special Effects.
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Will this course be taught asynchronously?:	No
Course Control Number (CB00) :	CCC000018754
Curriculum Committee Approval Date:	02/28/2024
Board of Trustees Approval Date:	04/16/2024
Last Cyclical Review Date:	02/28/2024
Course Description and Course Note:	ART 232 builds on material students learn in ART 231. Students are encouraged to take on projects of greater complexity of their own, such as working with the instructor to create a full suit of sci-fi armor, a futuristic helmet, or an imaginary vehicle.
Justification:	Mandatory Revision
Academic Career:	• Credit

Academic Senate Discipline

Primary Discipline:	• Art
Alternate Discipline:	No value
Alternate Discipline:	No value

Course Development

Basic Skill Status (CB08)

Course is not a basic skills course.

☐ Allow Students to Gain Credit by Exam/Challenge

Course Special Class Status (CB13)

Course is not a special class.

Pre-Collegiate Level (CB21)

Not applicable.

Grading Basis

• Grade with Pass / No-Pass Option

Course Support Course Status (CB26)

Course is not a support course

Transferability & Gen. Ed. Options

General Education Status (CB25)

Not Applicable

Transferability

Transferable to both UC and CSU

Transferability Status

Pending

Units and Hours

Summary

Minimum Credit Units (CB07)	3
Maximum Credit Units (CB06)	3
Total Course In-Class (Contact) Hours	72
Total Course Out-of-Class Hours	90
Total Student Learning Hours	162

Credit / Non-Credit Options

Course Type (CB04)

Credit - Degree Applicable

Noncredit Course Category (CB22)

Credit Course.

Noncredit Special Characteristics

No Value

Course Classification Code (CB11)

Credit Course.

☐ Variable Credit Course

Funding Agency Category (CB23)

Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2	4
Laboratory Hours	0	0
Studio Hours	2	1

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	0
Course In-Class (Contact) Hours	
Lecture	36
Laboratory	0
Studio	36
Total	72
Course Out-of-Class Hours	
Lecture	72
Laboratory	0
Studio	18
Total	90

Time Commitment Notes for Students

No value

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Prerequisite

ART231 - Introduction to 3-D Hard Surface Design (in-development)

<u>Objectives</u>
- Use software tools to create a hard surface asset, such as a helmet, armor, or spaceship.
- Use software tools to create surface textures and paint color on 3D digital object.

Entry Standards

Entry Standards

Course Limitations

Cross Listed or Equivalent Course

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Methods of Instruction	Laboratory
Methods of Instruction	Demonstrations

Methods of Instruction	Multimedia

Out of Class Assignments

- Projects (e.g. making a sculpture)
- Field activity (e.g. gathering source images)

Methods of Evaluation	Rationale
Project/Portfolio	Assignment -- Refining sub-tools using subtraction/merge
Exam/Quiz/Test	Midterm Exams
Exam/Quiz/Test	Final Exams
Project/Portfolio	Final Project
Project/Portfolio	Texturing and Rendering project

Textbook Rationale

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
No Value	No Value	No Value	No Value	No Value

Other Instructional Materials (i.e. OER, handouts)

Description	Maxon/Poxologic ZClassroom
Author	Maxon
Citation	No value
Online Resource(s)	

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

Design topology of a 3-D character or creature.

Use advanced software tools to create hard-surface assets in design software application.

Create an intermediate-level hard surface design.

SLOs

Use software tools to create an intermediate-level hard surface design.

Expected Outcome Performance: 70.0

Use software tools to simplify topology of a 3D asset.

Expected Outcome Performance: 70.0

Additional SLO Information

Does this proposal include revisions that might improve student attainment of course learning outcomes?
No

Is this proposal submitted in response to learning outcomes assessment data?
No

If yes was selected in either of the above questions for learning outcomes, explain and attach evidence of discussions about learning outcomes.
No Value

SLO Evidence
No Value

Course Content

Lecture Content

Project Preparation (12 hours)
- Establishing basic forms used in design
- Building a profile/story about object being created
- 3-dimensionally sketching basic forms of design using sculpture tools
- Gathering and analyzing concept art related to design project
- Reviewing tools used to create forms

Creation of Object Overall Form (12 hours)
- Determining mesh resolution
- Using the move brush
- Using polish brushes
- Using cutting tools
- Using panel loops
- Using methods of combining and subtracting forms

Designing Object Details (12 hours)
- Using brushes to create panel details
- Using brushes to create connector and rivet details
- Using alphas to create texture
- Using the spotlight tool to create texture and color
- Setting material and color values for render

Total hours: 36

Laboratory/Studio Content

Project Preparation (12 hours)
- Establishing basic forms used in design
- Building a profile/story about object being created
- 3-dimensionally sketching basic forms of design using sculpture tools
- Gathering and analyzing concept art related to design project
- Reviewing tools used to create forms

Creation of Object Overall Form (12 hours)
- Determining mesh resolution
- Using the move brush
- Using polish brushes
- Using cutting tools
- Using panel loops
- Using methods of combining and subtracting forms

Designing Object Details (12 hours)
- Using brushes to create panel details
- Using brushes to create connector and rivet details
- Using alphas to create texture
- Using the spotlight tool to create texture and color
- Setting material and color values for render

Total hours: 36

Additional Information

Is this course proposed for GCC Major or General Education Graduation requirement? If yes, indicate which requirement in the two areas provided below.

No

GCC Major Requirements

No Value

GCC General Education Graduation Requirements

No Value

Repeatability

Not Repeatable

Justification (if repeatable was chosen above)

No Value

Resources

Did you contact your departmental library liaison?

No

If yes, who is your departmental library liason?

No Value

Did you contact the DEIA liaison?

No

Were there any DEIA changes made to this outline?

No Value

If yes, in what areas were these changes made:

No Value

Will any additional resources be needed for this course? (Click all that apply)

- No

If additional resources are needed, add a brief description and cost in the box provided.

No Value