



COURSE OUTLINE : ART 246
D Credit – Degree Applicable
COURSE ID 001101
Cyclical Review: September 2020

COURSE DISCIPLINE : ART
COURSE NUMBER : 246
COURSE TITLE (FULL) : 3-D Digital Character Design II
COURSE TITLE (SHORT) : 3-D Digital Character Design II

ACADEMIC SENATE DISCIPLINE: Art

CATALOG DESCRIPTION

ART 246 provides students with advanced instruction in digital character design using ZBrush, building on skills acquired in ART 245. At the end of the course, students will sculpt and texture a highly realistic digital character. The course is project-based and runs as a traditional art studio course, with the instructor guiding students through the stages of character creation.

CATALOG NOTES

Note: Current industry standard digital animation software (ZBrush) will be used.

Total Lecture Units: 2.00

Total Studio Units: 1.00

Total Course Units: 3.00

Total Lecture Hours:36.00

Total Studio Hours: 36.00

Total Laboratory Hours To Be Arranged:0.00

Total Contact Hours: 72.00

Total Out-of-Class Hours: 90.00

Prerequisite: ART 245 or equivalent.



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ENTRY STANDARDS

	Subject	Number	Title	Description	Include
1	ART	245	3-D Digital Character Design I	Import a polygonal mesh from another three-dimensional (3-D) program into digital sculpture software;	Yes
2	ART	245	3-D Digital Character Design I	operate the digital sculpture software user interface;	Yes
3	ART	245	3-D Digital Character Design I	use 3-D editing tools to add sculptural and textural detail to polygonal mesh;	Yes
4	ART	245	3-D Digital Character Design I	create a displacement map;	Yes
5	ART	245	3-D Digital Character Design I	apply a displacement map to a low-resolution polygonal character.	Yes

EXIT STANDARDS

- 1 Create a photo-real character using digital sculpture software;
- 2 use the digital sculpture software toolset;
- 3 manage integration of ZBrush content into Maya.

STUDENT LEARNING OUTCOMES

- 1 Create a cinema-ready or game-ready 3-d character from imagination using digital character design tools.
- 2 Use advanced sculpture and painting tools in a 3-D character design software application

COURSE CONTENT WITH INSTRUCTIONAL HOURS

	Description	Lecture	Studio	Total Hours
1	Project Strategy <ul style="list-style-type: none"> • Topological analysis of character • Massing • Edge loops • Motion • Macroscopy before microscopy • Masking 	4	4	8



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2	<p>Sculpture of Character</p> <p>Torso</p> <ul style="list-style-type: none"> • Masking other body parts • Chest • Shoulders • Back • Abdomen • Arms <p>Unmasking arms and masking others</p> <ul style="list-style-type: none"> • Shoulder • Upper and lower arm • Wrist and hand <p>Lower body</p> <p>Unmasking lower body and masking others</p> <ul style="list-style-type: none"> • Midsection • Upper and lower leg • Foot • Head <p>Unmasking head and masking others</p> <ul style="list-style-type: none"> • Head and neck • Face • Ears 	8	8	16
3	<p>Integration of Digital Sculpture Content into Maya</p> <ul style="list-style-type: none"> • UV mapping • Exporting content • Displacement maps • Textures • UV maps • Re-evaluating and Exporting Topology • Re-drawing topology in Zbrush • Low-resolution topology • Topology in terms of character set-up 	4	4	8
4	<p>Projects Emphasizing Technical and Aesthetic Development</p>	20	20	40



OUT OF CLASS ASSIGNMENTS

- 1 Projects

METHODS OF EVALUATION

- 1 Peer and instructor review
- 2 Final projects
- 3 Final examination

METHODS OF INSTRUCTION

- Lecture
- Laboratory
- Studio
- Discussion
- Multimedia
- Tutorial
- Independent Study
- Collaboratory Learning
- Demonstration
- Field Activities (Trips)
- Guest Speakers
- Presentations

TEXTBOOKS

Title	Type	Publisher	Edition	Medium	Author	ISBN	Date
Handouts							