GA 4350 - CHARACTER RIGGING

Credits: 3

In this senior-level studio course, students will learn the fundamentals of building character rigs for animation. Topics include constructing joint chains, building control hierarchies, and techniques for facial manipulation. Naming conventions and hierarchical systems will be reinforced. Upon successful completion of this course, students will have created a fully functional rigged character suitable for animation.

Prerequisites: AN3D 3230 - 3D Computer Animation Motion Studies and; AN3D 3330 - 3D Character + Production Design or GA 3120 - 3D Modeling

Notes: (Formerly GA 3350)

Course Learning Outcomes:	Exceeding	Meeting	Developing	Not meeting	Program Outcomes	New Institutional Outcomes
Prepare 3D models for rigging and animation.	3D mesh indicates predicatable and logical requirments for deformation and rigged articulation	3D mesh indicates predicatable and logical requirments for deformation and rigged articulation	3D mesh indicates predicatable and logical requirments for deformation and rigged articulation	3D mesh indicates predicatable and logical requirments for deformation and rigged articulation	GA-1, GA-2, GA-3, GA-6	Design Competence, Critical Thinking
Create a rig with design specific controls as necessitated by motion.	Rig controls and UI design afford superior character functionality	Rig controls and UI design allow predictable character functionality	Rig controls and UI design recognize informed character functionality	IK/FK does not allow seamless switching solutions for character animation	GA-1, GA-2, GA-6	Critical Thinking
Compare and apply FK and IK rigging solutions.	IK/FK creates seamless switching and justified solutions for character animation	IK/FK estimates switching solutions for character animation	IK/FK recognizes solutions for character animation	IK/FK does not allow seamless switching solutions for character animation	GA-1, GA-2, GA-6	Critical Thinking
Integrate constructed rig and its related mesh via skinning tools.	Skinned mesh synthesizes any deformation and articulation into a highly appealing solution	Skinned mesh illustrates deformation and articulation into a rigged character solution	Skinned mesh defines some deformation and articulation for an appealing character rig solution	Skinned mesh lacks deformation and articulation for a rigged character solution	GA-1, GA-2, GA-3, GA-6	Critical Thinking
Recognize the importance of naming conventions in relation to rigging, and use them in the creation of custom controls.	Naming conventions are consistent and make a professional impact on the rigged character file	Naming conventions reveal organization within a rigged character file	Naming conventions include some structure for a rigged character file	Naming conventions lack adequate organization in a rigged character file	GA-1, GA-6	Critical Thinking