## AN3D 3230 - 3D COMPUTER ANIMATION MOTION STUDIES

Credits: 3

In this junior-level studio course students learn how to analyze movement utilizing the principles of animation. Studies include posing, keyframing, inbetweening and timing. Upon successful completion of this course, students will have the technical knowledge necessary to produce believable character animation.

Prerequisites: AG 2300 - Animation + Game Art Sophomore Portfolio Review; AN3D 1210 - 3D Computer Fundamentals or AN2D 3620 - 2D + Z

Notes: (Formerly AN 3720 3D Computer Animation Motion Studies)

| Course Learning Outcomes: | Exceeding | Meeting | Developing | Not meeting | Program Outcomes | New Institutional Outcomes |
|---|---|---|---|---|---|---|
| Animate 3D characters with a strong emphasis on weight, physics, performance and acting. | Animation demonstrates proper weight and acting is clearly driven by the thoughts of the character. Proper application of animation principals is apparent and acting theory is used to heighten the performance. | Animation exhibits weight and thought driven acting but may lack implementation of all animation principals. Performance reads but may appear stiff or floaty. | Animation is floaty, only demonstrating elementary understanding of weight and acting. Some motion does not appear to be driven by a thought process. | Animation does not read and does not follow any of the pricipals of animation or acting techniques | AN3D-1, AN3D-2, AN3D-6, AN3D-9 | Critical Thinking Design Competence |
| Recognize how to place and edit keyframes. | Animation keyframes are established and no excessive keyframes exist. Proper edits have been made included the deletion of Static Channels. | Animation keyframes are established but there are some unnecessary keyframes and need to be cleaned. | Animation possess some excessive keyframes and their structural arrangement is not polished | Animation possess excessive keyframes and no polish has been added to correct the initial keyframe creation | AN3D-1, AN3D-6, AN3D-9 | Critical Thinking |
| Practice adjusting motion curves to affect ease-ins and outs. | Animation curves have been properly adjusted to incorporate necessary ease in and out, all but the most minor adjustments remain. | Animation curves have been adjusted to incorporate some ease in and out of keyframes but require additional polish. | Animation curves are primarily default and are in need of adjustment. | No modification to animation curves has been accomplished | AN3D-1, AN3D-6, AN3D-9 | Critical Thinking |
| Relate the fundamental components of a rig to the way they affect model deformation. | Able to use rig controls to achieve natural poses that convey weight, thought and character. Line of action properly established and polished. | Demonstrates and understanding of rig controlls via posing but missing subtle adjustments that add weight and character. Line of action is established but needs refinement | Able to use rig controls but does not demonstrate a full understanding of line of action. pose lacks weight and character, pose is stiff and or mechanical. | Not able to use rig controls to achieve naturalistic poses, line of action is not established or is incorrect for the pose. Pose lacks weight and character. | AN3D-1, AN3D-6 | Critical Thinking |