**MULTIMEDIA ANIMATION (MGDA)**

**MGDA 105 Creative Development**
3 Credits
Hands-on strategies for developing, stimulating, and maintaining creativity to accomplish professional and personal goals.

**MGDA 120 Digital Design Tools**
3 Credits
Concentrates on the capabilities of digital cameras, raster photo-editing software, vector drawing software, and digital painting software for use in 3D animation. Explores how these image tools, combined with basic techniques, can be applied to create digital images, graphics, and videos.

**MGDA 149 Digital Drawing**
3 Credits
Explore foundational skills necessary to create characters for use in computer-based 3D animation courses. Learn to draw human and non-human forms first using pencil and paper, then apply those skills with computer graphic design software. Character development, anatomy, dynamic movement and action, and scenery emphasized.

**MGDA 150 Previsualization**
3 Credits
Introduces steps followed by professional media content producers and 3D animators/VR designers for producing preproduction material in a digital environment. Previsualization techniques include scriptwriting for 3D and VR experiences; plus traditional storyboarding, and virtual reality camera/actor layout blocking methods.

**MGDA 153 Beginning 3D Animation**
3 Credits
Encompasses all major aspects of creating 3D characters using animation software. Use of developed characters to learn how to animate for personality.

**MGDA 155 Audio Design**
3 Credits
Explores how audio recording principles enhance multimedia and 3D animated productions.

**MGDA 163 Audio Design**
3 Credits
Explores how audio recording principles enhance multimedia and 3D animated productions.

**MGDA 164 Digital Video Editing**
3 Credits
Introduction to digital non-linear video editing as a 3D Animation tool. Edit, manipulate and compress/export video. Assembly techniques including media management, editing tools, titles, and motion control; transitions and filters, and special effects are explored.

**MGDA 196 Topics**
1-3 Credits
Course may be taken multiple times up to maximum of 15 credit hours.

**MGDA 225 3D Character Design**
3 Credits
Explores advanced aspects of creating 3D characters on the computer, with an emphasis on digital sculpture techniques. Also examine facial animation, lip synchronization, scene design, and lighting setups.

**MGDA 229 Animation History**
3 Credits
Overview of the advent and evolution of animation from its earliest origins through the 1990s. Examine important individuals and studios in the animation field. View, analyze, and peer critique animation examples. Social, cultural, artistic movements, and influences on contemporary animation styles and animation techniques are analyzed.

**MGDA 250 3D Character Rigging**
3 Credits
Explore advanced character rigging features for 3D models. Understand adding controls to work with joints, forward kinematic (FK) and inverse kinematic (IK) blending, facial control using phonemes, eye movement, muscle systems, and skinning.