## GRA 1753  Motion Design I

**Course Description:** Best design practices and the twelve principles of animation are taught in this introductory course. Students will explore hand-drawn techniques and software tools used to create professional Motion Design projects in 2-D and 3-D environments. At the end of this course, a 15 second animated product advertisement will be produced. Students will demonstrate knowledge of outputting files formatted correctly for film, television and web application environments. (2-hour lecture; 2-hour lab)

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<th>Competency</th>
<th>Learning Outcomes</th>
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| **Competency 1:** The student will describe the characteristics of Motion Design by: | - Communication  
- Critical thinking  
- Computer / Technology Usage  
- Aesthetic / Creative Activities |

1. Identifying past and current industry leaders and content creators in the field of Motion Design.  
2. Exploring basic animation principles like squash & stretch, timing and keyframes.  
3. Exploring current industry standard animation software applications.

| Competency 2: The student will apply appropriate lighting and texturing to 3-D scenes by: | - Communication  
- Critical thinking  
- Computer / Technology Usage  
- Aesthetic / Creative Activities |

1. Identifying various lighting techniques.  
2. Producing images that display low key and high key lighting.  
3. Adding lights to a 3-D scene and applying various digital lighting attributes.  
4. Applying three-point lighting techniques to 3-D models.  
5. Applying texture materials to a 3-D surface.  
6. Modifying texture materials using an external photo editing software.
### Competency 3: The student will create photorealistic renders by:

1. Developing 2-D and 3-D graphics for high-quality still images or animated sequences.
2. Preparing lighting and textures for high quality still images.
3. Creating vector- and pixel-based graphics for import into an animation software application.
4. Outputting still images correctly to produce high-resolution images for print, web or video.

- Communication
- Critical thinking
- Computer / Technology Usage
- Aesthetic / Creative Activities

### Course Competency 4: The student will create basic-level animated graphics by:

1. Preparing storyboards, style frames and animatics for animated sequences.
2. Producing basic projects that involve 2-D and 3-D graphics, lighting, texturing and rendering.
3. Executing projects that utilize camera placement and movement.
4. Outputting files in compression-standard formats for print, web or video environments.

- Communication
- Critical thinking
- Computer / Technology Usage
- Aesthetic / Creative Activities

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