**Mohawk Valley Community College**

**Utica and Rome, New York**

**Course Outline**

**CG235 Applied 3D Technologies C-1, P-4, Cr-3**

**Prerequisites: CG231**

**Course Description:**

This course covers the theory, role, scope, and practice of emerging 3D technologies for digital animation students. Emphasis is placed on creating projects using 3D printing, photogrammetry, virtual reality, and other technologies relevant to 3D content creation. This course investigates approaches to tool and material use, utilization of software, interfacing with 3D printers, and finishing techniques for 3D prints.

**Course Objectives:**

Upon successful completion of this course, the student will be able to:

* Utilize photogrammetry
* Utilize fused deposition modeling methods
* Understand constraints of resin modeling
* Explore virtual reality content creation
* Determine the best use for augmented and virtual reality
* Understand the impact of web-based engines

**Major Topics:**

* Tool and material use
* Software utilization
* Slicing applications
* 3D printer interfaces
* Finishing techniques for 3D prints
* Virtual Cinematography

Reviewed July 2023