**Mohawk Valley Community College**

**Utica and Rome, New York**

**Course Outline**

**GA201- Modeling 2: Game Asset Creation C-1, P-4, Cr-3**

**Prerequisite: GA104 Modeling 1: Introduction to Modeling**

**Course Description:**

This course explores the creation of complex 3d models for use as props in real-time 3D game engines. Through a series of hands-on projects, students will learn and demonstrate techniques and skill sets employed in current game art production pipelines. Projects are executed focusing on the representation of complex objects to stylized and simplified forms, realistic material creations, and the construction of game assets utilizing predetermined polycounts and texture resolutions.

**Course Objectives:**

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

* Model Detailed Hard Surface Objects for Games
* Demonstrate Proper Edge Flow and Clean Mesh Creation
* Create Color, Normal, Alpha, Glow, Metalness, Roughness, and Ambient Occlusion maps
* Create objects within a set polygon count
* Design and Create Unique Game-Ready Assets

**Major Topics:**

* Hard Surface Modeling
* Edge Flow, Proper Topology, and Mesh Optimization Techniques
* Hero Prop Concept Design and Creation
* High to Low Poly Object Construction
* Composited Renders and Breakdown Production Video Creation

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