

## **VISUAL ART, FOUNDATION COURSE OUTLINE**

**Course Title:** DD1160 Digital Imagery 3D 1 3(1-0-2)

**Dates:**

**Class Time:**

**Class Location:**

**Instructor:**

**Office:**

**Phone:**

**E-Mail:**

**Prerequisite:** None

**Calendar Description:** This course and its sequel AR 1170 are designed to give students an introduction to the theory and practice of three dimensional computer generated images (CGI). Students will model animate and render photorealistic images suitable for animation, game animation, game development, and/or video.

**Course in Perspective:** Students will:

- a. Acquire an solid understanding of the concepts and principles of 3D object creation.
- b. Develop skills in the use of specific computer tools applicable to 3D CGI.
- c. Produce a portfolio of work which demonstrates their knowledge and expertise.

Topics will include but are not limited to:

Modelling basics of point, line and polygons. Organic shapes with spline curves, NUBS and Boolean operations.

Rendering of photorealistic images. Materials and surface treatments such as textures, reflection, refraction, transparency, specularly and bump mapping. Photographic and atmospheric effect such as motion blur, depth of field and fog.

**Assignments:** Assignments will be designed to develop skills and expertise in the use of the appropriate tools for creating 3D CGIs. A portfolio of work that culminates in one major project will be required.

|                                 |                  |     |
|---------------------------------|------------------|-----|
| <b>Criteria for Evaluation:</b> | Term assignments | 40% |
|                                 | Final portfolio  | 50% |
|                                 | Participation    | 10% |

**Note:** More than 10% absenteeism may constitute a failure, except for medical or extenuating circumstances, in which case a doctor's letter will be required.