Course Prefix and Number:  DRF 299  Credits:  3

Course Title:  Independent Study in Drafting: Computer-Aided Modeling and Rendering I

Course Description:  Focuses on training students in the contemporary techniques of 3D modeling, rendering, and animation on the personal computer. Introduces the principles of visualization, sometimes known as photo-realism, which enable the student to create presentation drawings for both architectural and industrial product design. Uses computer animation to produce walk-throughs that will bring the third dimension to architectural designs. Prerequisite:  DRF 232. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

General Course Purpose:  The course introduces the student to the concepts and procedures related to advanced 3D graphics.

Course Prerequisites and Co-requisites:  
Prerequisite:  DRF 232

Course Objectives:  
Upon completing the course, the student will be able to:
  a. Create 3D designs and realistic CAD presentations;
  b. Apply rules and methods of “scene” composition;
  c. Create computer animations; and
  d. Merge photo images with 3D CAD models.

Major Topics to Be Included:  
  a. Principles of 3D modeling and wireframe creation
  b. Material/texture applications
  c. Lighting/shadow control and composition
  d. Animations

Effective Date of Course Content Summary:  September 24, 2015