Course: IT 212 CADD III

Credits: 3

Prerequisites: IT 211 or permission of the Instructor

Description: CADD III emphasizes advanced CADD drawings, 3-D solid models, and rendering which incorporates a capstone project. This course promotes self-paced learning and synthesis of skills previously applied in CADD I and CADD II. Students will demonstrate mastery and proficiency in Computer Aided Drafting & Design techniques.

Learning Outcomes: Upon successful completion of this course, students will be able to:
• Demonstrate proficiency in advanced CADD drawings.
• Apply complex rendering techniques.
• Demonstrate mastery of CADD commands and functions.
• Create professionally equivalent technical drawings.
• Design realistic 3-D solid models.
• Develop skills and information literacy through critical thinking activities, teamwork, collaboration, and a hands-on approach to learning.

Topical Outline:
• Safety
• Review of CADD I and CADD II
• Advanced application of CADD software
  o Functions and commands
  o Advanced drawing and modifying objects
  o Modifying properties
• Advanced 3-D drawings
• Convert 2-D drawings into 3-D drawings and back
• Construction and meshing of 2-D and 3-D surfaces
• Apply raster images to 3-D models
• Advanced rendering
  o Application materials
  o Lighting
• Project management
• Explore career opportunities in CADD

Text:
Technical Drawing by Giesecke, Prentice Hall
Harnessing AutoCAD 2007 by Krishnar, Thomson
Student Assessment:
Assessment is accomplished based on assignments, term project, and exams, as follows:

- Weekly Assignment: 30%
- Two mid-semester exams: 30%
- Final exam: 25%
- Term Project: 15%

Academic Integrity:
Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation. Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense.
As such, a plagiarized paper or report automatically receives a grade of **ZERO** and the student may receive a grade of **F** for the semester at the discretion of the instructor.

Tutoring & Project Assist:
If you are having difficulty with work in this class tutoring is available through the Center for Academic & Student Success. If you think that you might have a learning disability, contact Project Assist at 856.691.8600 x 1282 for information on assistance that can be provided to eligible students.

Before Withdrawing From This Course:
If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA, which can limit or eliminate future financial aid in addition to causing academic suspension.