Course Title: **CAD 152**

Course Leader: **Adam C. Bridendolph**

Expected Learning Outcomes for Course:

Upon completion of this course, students will be able to:

- Identify, apply, and discuss the principles and elements of computer-aided design
- Create new CAD drawings using the fundamental drawing and modifying commands
- Edit and modify existing CAD drawings
- Utilize the CAD layering system to organize data and control display
- Plot CAD drawings to create a portfolio of original work
- Be familiar with the field of mechanical engineering and architectural drafting
- Apply appropriate industry standards to the computer-aided design process

Assessment:
(How do students demonstrate achievement of these outcomes?)

Drawings, portfolio, final exam, and homework assignments

Validation:
(What methods are used to validate your assessment?)

Feedback from internship employers, review of portfolios, performance on final exam

Results:
(What does the data show?)

Students have acquired enough skill to continue on to the next CAD course: CAD 153, CAD 226, CAD 228, CAD 230.

Follow-up:
(How have you used the data to improve student learning?)

Additional emphasis and assignments in areas suggested by advisory committee
(i.e. proper use of lineweights, scaling, layers)

Budget Justification:
(What resources are necessary to improve student learning?)

Rulers and Calipers for reverse engineering projects. Also, 3D printing materials to show more hands on activites.