Course Title: CAD 153

# Course Leader: Adam C. Bridendolph

# **Expected Learning Outcomes for Course:**

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

- Accurately and completely dimension multi-view drawings according to ASME standards
- Create and apply different dimensioning styles according to drawing needs
- Apply tolerances to a drawing
- Draw a section view and apply a hatch pattern to the view
- Draw and dimension a variety of 3D problems
- Create an electronic portfolio of their best works

### Assessment:

(How do students demonstrate achievement of these outcomes?)

Drawings, portfolio, mid-term exam, final exam, and homework assignments

### Validation:

(What methods are used to validate your assessment?)

Feedback from internship employers, review of portfolios, performance on mid-term and final exam

### **Results:**

(What does the data show?)

Students have acquired enough skill to continue on to the next CAD course, either CAD 226 or CAD 228. The majority of students received a "B" or higher on their portfolios.

## 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, dimensioning)

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## **Budget Justification:**

(What resources are necessary to improve student learning?)

Maintain license for CAD software and equipment for 3D printer.