

CAD Certificate Program

Student Assessment

Part I-Assessment Summary (AY 03-04)

A. Program/Discipline Mission Statement

- **Mission:** It is the mission of the Computer Aided Design Department to provide a learner-centered environment to facilitate student learning and meet the needs of the business community by providing a relevant and current curriculum that is base on sound educational principles. The Computer Aided Design Department is committed to using appropriate instructional strategies, making effective use of instructional resources, and continuously assessing student academic achievement for the purpose of ongoing improvement.
- **Purpose:** The purpose of the Computer Aided Design department's assessment is to provide student data to the faculty for on going improvement of teaching skills among faculty and also to evaluate the student's ability to demonstrate the program's intended learner outcomes outlined in section B. The intended learner outcomes are measurable skill sets that will provide the department's faculty with the data that the department will use to provide an on going improved student learning environment.

B. Intended Learner Outcomes

- 1) Demonstrate the steps necessary to start a drawing, including the computation of a scale factor and its correct usage.
- 2) Demonstrate the ability to produce basic drawing projects to scale.
- 3) Demonstrate the ability to setup and use the layer commands.
- 4) Demonstrate the ability to setup and use the basic dimensioning commands.
- 5) Demonstrate the ability to setup and use the text commands.

C. Benchmark

The Computer Aided Design program's benchmark of 80% proficiency has been established for each of the program's intended learner outcomes.

D. Assessment Results

1. Historical Context

Last year's assessment summary had suggested that faculty will need to adapt to the new software and discuss how to cover the competencies that impact the intended outcomes.

D. Assessment Results (continued)

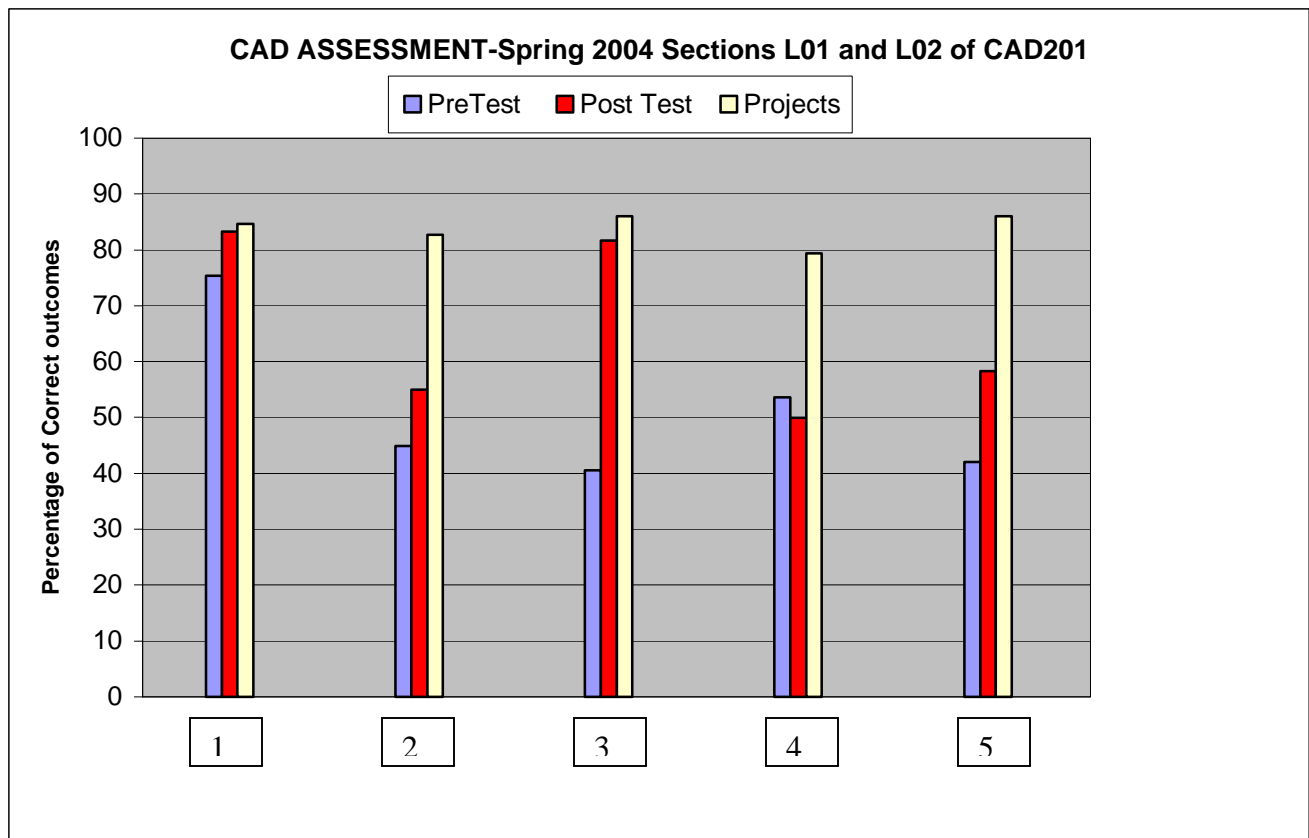
Historical Context (continued)

The CAD faculty is now meeting on a regular basis to discuss how each faculty member is teaching the five outcomes. After each meeting we discuss what we like best about each teacher's presentation of the material. We as the CAD faculty will then establish a concise and consistent method of curriculum delivery. This method of evaluation will become a standard process within the CAD department.

2. Current Year Data Results

As we had hoped for, the results from the pre-test to the post-test and project data had indicated an improvement on student outcomes.

CAD Program's Five Assessment Outcomes for CAD201



1. Demonstrate the steps necessary to start a drawing, including the computation of a scale factor and its correct usage.
2. Demonstrate the ability to produce basic drawing projects to scale.
3. Demonstrate the ability to setup and use the layer commands.
4. Demonstrate the ability to setup and use the basic dimensioning commands.
5. Demonstrate the ability to setup and use the text commands

D. Assessment Results (continued)

3. Analysis

As we had hoped for, the overall results from the pre-test to the post-test had indicated an improvement on student outcomes from last year's data to this year's assessment of the same outcomes.

From the chart above, the areas of concern are from this year's assessment and the results from the written tests. Listed below is a list of the specific question numbers and intended outcome numbers of concern.

Question #4 (outcome #2- setting a drawing's scale)

Question #10 (outcome #4- dimensioning commands)

Question #12 (outcome #4- dimensioning scales)

Question #13 (outcome #5 setup of text scales)

E. Use of the Results

These questions consistently came up as errors for both sections of CAD201 students. The areas of concern will be discussed at the next department meeting. Although the project assessment data shows to be above the 80% benchmark, we as faculty have concerns about many of the test outcomes being below the 80% benchmark for the written section of the assessment.

Faculty will review the wording of each question on the Pre and Post-Test for consistent verbiage being used in the classrooms among the different faculty. Some of the comments from the students have been related to not understanding the question.

Therefore, the faculty will need to discuss how we will cover these competencies in the future classes so that each of the faculty may better help the students learn the intended outcomes.

This year's summary report will recommend the future pre-test and post-test will represent 10% of the student's final grade for CAD201. This decision has been based on the student's comments about not having to put any effort into doing a good job because the scores don't apply to the final grade.

Assessment grades being added as a part of the student's final grade should provide an incentive in working with the faculty to provide more accurate data for the assessment program.

The information will be shared with the program's advisory committee and students participating in the assessment. The information will also be shared with the faculty during the department faculty meetings to determine teaching differences between sections.