EXPECTED EDUCATIONAL RESULTS

As a result of completing this course, the student will be able to do the following:
1. Explain the advantages of computer-aided design/drafting.
2. Use the menu structure and data input conventions to create, view, edit, and plot engineering drawings.
3. Use the basic two-dimensional entity draw commands.
4. Use the basic two-dimensional edit and inquiry commands.
5. Use the basic display controls needed for viewing two-dimensional drawings.
6. Use layers and other supplied drawing aids.
7. Use the basic dimensioning commands.
8. Print/Plot/Present engineering designs created using CAD software.

GENERAL EDUCATION OUTCOMES

I. This course addresses the general education outcome relating to communications as follows:

   A. Students enhance reading skills by reading topics from assigned text book/reference to learn various kinds of commands and how to apply them in the production of simple two-dimensional drawings.

   B. Students develop writing skills when they need to provide short answers to test questions.

   C. Students improve their listening skills by actively participating in class discussion/lecture or demonstration to learn basic drawing/editing commands of the software to produce simple engineering drawings.

II. This course addresses the general education outcome relating to problem-solving and critical thinking skills by making these skills an important part of their course work. Students learn to apply technical problem-solving and use critical thinking techniques to plan preliminary steps needed to start a drawing and to develop most efficient way to complete it. The class/home assignments attempt to enhance their ability to learn and practice major commands on wide range of drawing exercises.

III. This course addresses the general education outcome relating to mathematical concept usage and scientific inquiry as follows:

   - Use of appropriate scales and units to produce drawings from many engineering disciplines.
   - Assignments require calculations based on geometry to determine sizes of planar figures and use of coordinates for construction multi-views.

IV. Students organize and analyze the information required to complete assignments/presentations using Computer-Aided Design and Drafting software packages.
All questions from the final Exam were used for assessment and thus reflect all EERs were assessed.

Dunwoody campus:
Jay Terry:

Students scored 70% or higher in 1051 questions out of a total of 1182 questions ~88.92%

Comments:
- The performance is above the average expected. The use of CAD performance reflected this performance as well
- Most topics seemed to show positive performance in learning and teaching. The exam was multiple choice and T/F with a drawing technical drawing that made up the majority of the exam. Blocks, Text, concepts of layer control, and drawing isometric drawings were subjects of poor performance.

Clarkston campus:
Amit Cholkar:

Section-1:
Q1: Assesses 2D AutoCAD concepts and dimensioning.
Q2: Assesses creating Isometric Drawing in AutoCAD
Q1: 90.47% of the students scored more than 70% on this question
Q2: 76.19% of the students scored more than 70% on this question

Comments:
- The assessment questions were the part of the final exam and it contained 4 questions in total
- The results are within the norms expected. No changes are needed at this time.
- Q2 has a lower percentage; I will give more practice problems to students the next time this course is taught and see if there is any improvement.

Section-2:
Q1: Assesses 2D AutoCAD concepts and dimensioning.
Q2: Assesses creating Isometric Drawing in AutoCAD
Q1: 84.21% of the students scored more than 70% on this question
Q2: 73.68% of the students scored more than 70% on this question

Comments:
- The assessment questions were the part of the final exam and it contained 4 questions in total
- The results are within the norms expected. No changes are needed at this time.
- Q2 has a lower percentage; I will give more practice problems to students the next time this course is taught and see if there is any improvement.

The assessment results reflect the EEOs were achieved to a satisfactory level.

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