

Student Learning Outcomes for CDI 58A

Unigraphics NX (Beginning) - No longer offered

Team Members:

Team Leader:

[Louis Gary Lamit](#) (8627) in CDI

Other members:

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Additional team members/notes about team:

James Gee

Additional Notes:

Outcomes:

Outcome 1 Phase I: Statement

Functioning as a designer using Unigraphics NX, the student will create an engineering document package which complies with industry-defined standards and shall include the following: * components modeled using CAD design tools* assemblies generated from multiple components* engineering drawings for components and assemblies

Outcome 1 Phase II: Assessment Strategy Used:

Assessment Quarter: Fall 2011

Assessors: James Gee

Assessment Tools: •

Sections being assessed: 61, Z

Outcome 1 Phase III: Reflect & Enhance

Number of people involved in Phase III: 39

Changes:

N/A

Methods:

Catalyst Course Management System was used to issue, receive, & grade assignments

throughout the quarter. Video, Instant Messaging, and Email are used to expand student knowledge of the software and the class requirements. A forum in Catalyst is used to encourage and inform students. Reading assignments are the foundation of the course. 138 projects of various sizes & complexity were assigned throughout the quarter. Exercising the software will bring meaningful understanding. 1 Final Project to determine where further study may be needed. A “Student Documentation Package” (Microsoft Word, pdf, or equivalent format) is used to collate and document all course work.

Findings and Conclusions:

Summary: Of the 51 enrolled according to our Banner System, 6 dropped before the first day of class. Four students withdrew within the 1st week for various reasons. Two students withdrew within the 2nd week for various reasons. 39 students participated in the class. 32 students will pass this course. 6 students received a “W” for the class. Over 50% of the students in this section completed all of the work. Of course, I am most concerned with the students unable to pass the course. The vast majority of those not passing the course completed less than 20% of their assignments and quizzes and did not attempt the Final Project or submit a “Student Documentation Package”. In other words those who tried were successful and those who did not failed. The question still remains, “why did these students stop trying?” As the last day to withdraw grew near, I contacted students by email to determine their desire to continue. I received no responses. These students did not complete the course. The General Trend: NX software is widely used in the automotive industry today. Students of CAD find NX to be an indispensable tool when designing and managing simple to large designs. The student who takes the instructors advice to budget 10 hours each week devoted to this particular course does very well. I would like to point out that this course, when taught in our classroom is 2 four hour periods of lecture/lab and does not include reading which is expected to be done as homework. In general, students who procrastinated or failed to commit time each week, fell too far behind in the course. The course is a hybrid, thus, many students work entirely from a remote location. Students studying in our classroom seem to have a much better rate of success than those studying remotely. Is this situation due to the discipline inherent in the classroom environment? I can't say for certain as there were only an average of 16 students working in the classroom (throughout the quarter) thus not the best measure of this metric. I believe some students were dismayed to discover learning the software would not teach them design or drafting. A basic understanding of design and drafting is needed to appreciate the structure of an information management software such as NX. A number of students have used our entry-level CAD classes as a survey of an industry or career. 33 students completed the class and received a grade. Activity Report: *17 students received a grade of A (52% of class)*3 students received a grade of A- (9% of class)*3 students received a grade of B (9% of class)*2 students received a grade of B- (6% of class)*7 students received a grade of C (21% of class)*1 student received a grade of F (3% of class)

Enhancement (Planned Actions)

Part I:

Add recorded lectures for each chapter, covering subtle changes or other details not directly or clearly discussed in the text. Recorded lectures will also have the quality of updating the student and the course content with respect to software upgrades which occur during the school year. In future I will use CCC Confer for online conferencing to directly assist students with difficult content. I will enforce a rigid schedule of assignment submission, quizzes, and Exams. Through Catalyst, I can still be flexible, but I won't

advertise that fact to my students.

Part II:

I am going to conduct post class interviews with my unsuccessful students by email. I will implement whatever discoveries the poll discloses. I will adjust my SLO appropriately with regard to the review.

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