

Student Learning Outcomes for CDI 85A

AutoDesk Inventor - No Longer Offered

Team Members:

Team Leader:

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

Additional team members/notes about team:

Additional Notes:

Other members:

1. [Max Gilleland](#) (x5578) CDI
 2. [Robert Benzio](#) (x) CDI
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Outcomes:

Outcome 1 Phase I: Statement

Functioning as a designer using Inventor, 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: Winter 2010

Assessors: Robert Benzio

Assessment Tools: • •

Sections being assessed: 61, Z

Outcome 1 Phase III: Reflect & Enhance

Number of people involved in Phase III: 27

Changes:

n/a

Methods:

Outcome 1: Assessment Planning [edit]Assessment Strategy Used:Quarter: Winter 2011Assessors: Louis Gary Lamit and Robert BenzioAssessment Tools: Portfolios • LogsSections being assessed: 61L and 63ZOutcome 1: Reflect & Enhance [edit]Number of people involved in Phase III: 24Methods:Assessment Tools:*48 exercises and skill exercises in the book.*18 handout exercises.*7 miscellaneous parts to test modeling skills.*Final derailleur project to demonstrate complete use of software.*Final Student Documentation PortfolioMethods:Catalyst Course Management System was used to issue, receive, & grade assignments throughout the quarter.*Reading assignments covering 7 chapters of the current text are the foundation of the course content with 48 exercises and skill exercises from the text book.*18 handout exercises increasing in complexity and skill level to test students knowledge of software functionality.*7 miscellaneous part modeling exercises that demonstrate key software functions and abilities.* Final derailleur project.Derailleur Project is used to measure the students ability to create a complete design package and demonstrate that the student has full knowledge of software functionality and capabilities.*Final Student Documentation Portfolio (Adobe Acrobat pdf format) is used to collate and document all course work.

Findings and Conclusions:

Over 54% of the students in this section completed all of the work, with about 65% excellence (completion of 90+% of all assigned course work).The general trend for the Autodesk Inventor class was that if he did the work and listen to the lectures and put a little bit of time and effort in these are the students that did very well in the class. This particular class is not taught very often and when comparing this to the previous time this class was taught I did not see any discernible change in grade distribution. The one thing I was able to see was a larger number of students interested in the class as compared to when the class was offered in 2008. The one main difference for this can be attributed to the department offering an online section for the class. As for the drop rate for this class is compared to the previous time it was taught was a lot lower. This could be attributed to the weak economy and people going back to school to bring their technical skills up. Also that some of my students that were working in industry their companies have switched to Inventor and they were coming to class to get a more in-depth understanding of the software. Another general trend was that typical students would excel at the work (s) he attempted. Work assigned early in the quarter is usually done well, leaving work assigned later in the quarter incomplete in some cases. In general, the student who takes the instructors advice to budget 8 hours/week of study devoted to this particular course does very well, while the student who spent less time on the course work doesn't do as well. Activity Report: 11 students with 90% or higher. 6 students with 80% to 89% 1 student with 74% 1 student with 62% 3 students with 51% or lower 1 incomplete

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. Overall because his classes taught very infrequently most of the video lectures and course material needs to be reevaluated each time this course is taught. With that said some of the basic models and stand-alone projects can be reused. In a future class we may try and reduce the number of book exercises or hand out exercises and throw in a midterm evaluation with the short answer online test and a quick modeling component.

Part II:

n/a

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