

## Student Learning Outcomes for CDI 67A

*SolidWorks (CosmosWorks) - No longer offered*

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### 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. [Paul Klingman](#) (x8696) CDI
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### Outcomes:

**Outcome 1 Phase I: Statement**

**Outcome 1 Phase II: Assessment Strategy Used:**

Assessment Quarter: Fall 2010

Assessors: Paul Klingman

Assessment Tools: ••

Sections being assessed: 01

**Outcome 1 Phase III: Reflect & Enhance**

**Number of people involved in Phase III:** 3

**Changes:**

**Methods:**

Assessment Tools:\*1 Student Design & Documentation Portfolio\*24 targeted analysis projects which were assigned throughout the quarter  
Methods:Catalyst Course Management System was used to issue, receive, & grade assignments throughout the quarter. This was the second term in which Catalyst was used to manage CDI Dept. courses. Progress is being made across the department, and the course shell is proving to

be a solid method of issuing course content, and collecting/archiving assignments & grades. \*Reading assignments covering 15 chapters of the current text are the foundation of the course content.\*24 projects of various size, scope, & complexity are assigned throughout the quarter. A zipped file containing all the data files required for reconstitution of the original model study remains in the Catalyst archive, available for detailed review at any time (even years later) after the student's submittal.\*Final Student Documentation Portfolio (Adobe Acrobat pdf) is used to collate and document all course work into a visual image format, easily accessible to non-technical viewers.

### **Findings and Conclusions:**

Over 32% of the students in this section completed all of the work, with about 68% excellence (completion of 90+% of all assigned course work) within the section. The general trend in the class was that the typical student would excel at the work (s)he attempted. Work assigned early in the quarter is usually done well, leaving work assigned much later in the quarter incomplete in a few cases. Another key item is that students at this level have been "distilled", such that only motivated students would elect to take this class. This manifests itself by the high average & median scores, with relatively few unsatisfactory grades. Another indication is that there are two distinct groups of students with respect to grades: either the student scores over 90% or under 50%, which could be evidence of the student's prior training or lack of same. Regarding the rather high (30%) dropout rate: A significant percentage of students enroll in this class without any real understanding as to how complex & advanced the subject matter is. This comes clear the first week or two, and there is a bit of an exodus. However, after the initial reality check, retention is good, above 90%. 28 students completed the class and received a grade. Activity Report: \*16 students received a grade of 90+% (61% of class)\*6 students received a grade of 80-90% (25% of class)\*1 student received a grade of 70-80% (8% of class)\*6 students are under -Incomplete status (6% 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. Some consideration should be given to scheduling the course in either Winter or Spring Quarter. The basic reason for this is that Fall Quarter occurs a little early in the "version year" of the program to expect a stable program. What that means in lay terms is that during the school year, the program (SolidWorks) undergoes several upgrades as a matter of protocol. After some initial difficulties in characterizing the exercises, DeAnza Faculty & Staff performed some tests which showed a significant change in the program's execution of the tools used in SolidWorks Simulation. The consequence of this is that the pre-running of the exercises done during the summer prior to holding the class, had to be repeated during the active quarter, sometimes just prior to running the lecture. A solution to this problem would be to have one quarter of 'production-level' software to characterize before holding the class. Add a couple of on-line mid-term exams to the assessment tools. This will gage the student's knowledge of the subject matter best demonstrated outside of a practical exercise.

#### **Part II:**

N/A

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