

**SLO 2. Math Applications: The graduate of the SUNY Canton Construction Technology Management program will be able to apply college level math concepts (Business Math, Algebra, Geometry and Trigonometry) in the solution of construction related problems**

**(I think this corresponds to ISLO 4. Quantitative Literacy)**

**From CONS111 Commercial Structures - Spring 2018**  
**(Reiter)**

**1. Force required to drive a pile HW: 8 of 16 passed  
(NOT MET)**

***Instructors comment:*** This exercise requires unit conversions and calculating areas and circumference. Students math skills are generally weak, they struggle with units and simple area calculations.

**2. Determine volume of fill on Exam 1: 10 of 16 (Not Met)**

***Instructor's comments:*** Students have problems with units, they do not understand the difference between an area and a volume. Students' math skills are generally weak. At college level they should be able to perform simple operations!

**From CONS112 Wood Structures - Fall 2018 (Reiter)**

- 1. Exam 1. convert from engineers measure to architects measure and vice versa**

**12 of 16 (75%) MET**

- 2. Final Exam Question: calculate simple material takeoffs based on area and volume.**

**10/16 (63%) NOT MET**

**Instructor Comment: Sixth grade level math skills!**

**From CONS101 Elementary Surveying - Fall 2018 (Reiter)**

- 1. Traverse Reduction HW: 25 of 31\* (MET)**
- 2. Unit Conversions HW: 26 of 62\* (NOT MET)**
- 3. Unit Conversions on Exam: 19 of 31\* (NOT MET)**

**From CONS274 Construction Management - S2018 (Reiter)**

**Select Equipment based on productivity rates.**

**(Exam): 25 of 26 (MET)\***

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**From CONS216 Soils in Construction - S2018 (Rygel)**

**Mass/Volume HW calculations for soil. 19 of 23 scored  
>70\* (MET)**

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<b>SUMMARY CTM SLO2/ SUNY CANTON ISLO 3 (QM) 2018</b>		
<b>Number of Measurement Items</b>	<b>Number Met</b>	<b>Total Success Rate</b>
<b>8</b>	<b>3</b>	<b>135 of 237 (60%)*</b>

## How will we respond to this deficiency?

The base ability of students entering the program is not as expected.

- Pretest and place better. Employ an Engineering Math supplement required for students that do poorly on pretest.
- Provide a practical Math class. (Note this has been tried and rejected MATH135 because numbers were too low and many student wanted to plan for 4 year degrees so need the “mainsteam” math.)
- Employ a Math element in SOET101.
- Recognize that perhaps the problem is that we have students who wish they were taking a trades program, not a “management” program. (Building Trades was discontinued under Wells.)
- Insist on a more elaborate tutoring process.
- Request evaluators to differentiate by program.

COST: None requested based on this.

**SLO3. The graduate of the SUNY Canton Construction Technology Management program will be able to use common computer applications (Word Processing, Spreadsheets, Database, and Cadd) effectively.**

**(Corresponds to SUNY Canton ISLO 3: Foundational Skills/Information Literacy)**

From CONS132 Construction Drafting S2018 (Burnett)

1. On a homework assignment the student will draw a CAD drawing implementing basic standards learned in SOET 116. 14 of 15 students met this target 93% (MET)
2. On selected lab assignment demonstrate creation of CADD symbols 13 of 14 : 93% (MET)
3. Students will create a basic set of House plans similar to what is required by NYS CODE to the level of obtaining a building permit: NOT MET due to time constraints in the class

From SOET101 Intro to Computer Applications F2018  
Pillay

Grades: 7 of 8 scored C or better (Net GPA in the class was 3.0) MET

From CONS216 Soils S2018 (Rygel)



**Use of Word in preparing Lab reports. No specific evaluation of the software, however**

**22 of 23\* scored >70% on term paper. (presumed MET)**

**From CONS216 S2018 (Rygel) Excel used in writing lab reports**

**Use of Excel to prepare Grain size distribution plot. 23 of 23 were successful.\* (MET)**

**From CONS274 Construction Management : Spring 2018 (Reiter)**

**Using MS Project on HW to prepare a CPM schedule. 24 of 26 successful\* (MET)**

**From CONS222 Estimating: Fall 2018 (Reiter)**

**Use Excel for cost estimates.**

**13 of 20 (65%)\* students were able to develop a functional well formatted spreadsheet to aid in their estimate and extension. (NOT MET)**

**Instructor Comment: CTM students struggled with this.**

<b>SUMMARY CTM SLO 3 / SUNY CANTON ISLO 3 (IL) 2018 Computer Applications</b>		
<b>Number of Measurement Items</b>	<b>Number Met</b>	<b>Total Success Rate</b>
<b>7</b>	<b>6</b>	<b>115 of 139 (83%)*</b>

### **Comments**

- 1. Seems to be OK.**
- 2. SUNY Canton ISLO Information Literacy not addressed.**

**Seems like this could come out of the writing intensive course research paper 24 of 26.**

**ISLO 4. Social Responsibility Ethical Reasoning,  
Global Learning, Intercultural Knowledge, Teamwork**

**Is only addressed by the CTM in SLO 6 Teamwork.**

**From CONS101 Elementary Surveying Fall 2018  
(Reiter)**

**Score as Party Chief in Lab: 27 of 31 were successful \*  
(MET)**

**I suggest that a peer evaluation/rating be performed.**

**From CONS280 Construction Materials - F2018  
(Rygel)**

**Group concrete mix design oral presentation: 29 of 29  
(100%)\* (MET)**

A great deal of the class is done in groups: I suggest  
a peer eval be implemented.

**ETHICS**

**From CONS274 Construction Management S 2018 –  
(Reiter)**

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choose between ethical and non-ethical responses relating to typical issues encountered in the construction management field on Exam. 23 of 26\* students responded adequately (MET)

<b>SUMMARY CTM SLO 6 (Teamwork)/SUNY CANTON ISLO 4 (T) 2018</b>		
<b>Number of Measurement Items</b>	<b>Number Met</b>	<b>Composite Success Rate</b>
<b>2</b>	<b>2</b>	<b>56 of 61 (95%)</b>
<b>ETHICS</b>		
<b>1</b>	<b>1</b>	<b>23 of 26</b>

- 1. No evaluations performed of CTM specifically**
- 2. No “teamwork” evals done specifically**
- 3. 3 of 4 SUNY Canton ISLO parameters not present.**

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## **PROGRAM NEEDS**

- 1. Investment in Faculty – offer Andrew and Rob Continuing Appointment**
- 2. Space has been stolen – although not reflected in this assessment summary, the space now available to do labs is inadequate.**
- 3. Lab sizes need to be decreased (CONS111, 112, 280)**
- 4. CONS222 Estimating is important but difficult to teach in present format. We need to dedicate a class to CTM and a class for CIVIL**
- 5. Math – Pretesting that leads to proper placement**
- 6.**

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#### **Outcome: Outcome 4.1 Industry Vocabulary**

**Student recognizes terms and incorporates lingo in written and spoken academic activities**

**From CONS111 S2018 (Reiter) Communicate using an extensive vocabulary of construction terms and phrases common to the industry. Article review HW 13 of 16 succeeded (met)**

**From CONS111 S2018 (Reiter) Final Exam multiple choice. No Data provided.**

**From CONS112 F2018 (Reiter) Final Exam multiple choice. No Data provided.**

**From CONS274 (S2018) Reiter**

**Construction Contract Organization Flow Diagram Exam question. 21 of 26 were successful\* (MET)**



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#### **SLO 6. Professional Skills**

**Student has acquired a variety of professional-related abilities typical of that expected of an entry level technician. These include print reading, quantity take-off, interpretation of schedules and team work.**

#### **Print Reading**

**From CONS132 S018 (No report)**

**From CONS222 F2018**

**From CONS274**

#### **Scheduling**

**From CONS274 S2018 (Reiter) Exam item**

**22 of 26 were able to create the CPM network and identify critical path\* (MET)**

**16 of 26 were able to compute the float\* (NOT MET)**

#### **Team Work:**