

**Assurance of Student Learning
2018-2019**

Ogden

School of Engineering and Applied Sciences

Computer Information Technology 555

Use this page to list learning outcomes, measurements, and summarize results for your program. Detailed information must be completed in the subsequent pages.

Student Learning Outcome 1: Validation of student mastery of CIT technical domains

Instrument 1	DIRECT measures of student learning
Instrument 2	
Instrument 3	

Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 1.	Met	Not Met
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Student Learning Outcome 2: Examination of student mastery of CIT technical domains

Instrument 1	DIRECT measures of student learning
Instrument 2	
Instrument 3	

Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.	Met	Not Met
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Student Learning Outcome 1

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Student Learning Outcome	Validation of student mastery of CIT technical domains												
Measurement Instrument 1	<p>DIRECT measure of student learning: All CIT students are given six assessments in the entry course CIT 300, then again in the exit course AMS 490. The assessments, which are similar to certification exams, cover the technical domains of database, hardware, networks, programming, security, and technology management. Scores are associated with each student, which allows for pairwise comparison. Even so, because ~75% of CIT students transfer with an AAS in IT, they only take four required courses, of which three represent the technical domains. The rest (seven courses) are elective. Thus, it is difficult to draw specific conclusions about individual domain assessment gain scores since different students take different electives that may or may not support learning in a specific domain. As a result, we validate student mastery of the CIT technical domains through an aggregate gain score of CIT technical domain assessments.</p>												
Criteria for Student Success	For success, a minimum aggregate percentage gain score of 30% should be achieved.												
Program Success Target for this Measurement	An aggregate percentage gain score of 36% was achieved.	Percent of Program Achieving Target	As an aggregate, 100% of the program achieved the target.										
Methods	<p>For the 201810 through 201910 period, 15 students completed AMS490 and six CIT domain assessments including database, hardware, networks, programming, security, and technology management. These scores were then compared to their entry assessments in CIT300. Percentage gain scores were calculated for each, and an average derived:</p> <table style="margin-left: 40px;"> <tr> <td>Student Count:</td> <td style="text-align: right;">15</td> </tr> <tr> <td>Max gain score %:</td> <td style="text-align: right;">154</td> </tr> <tr> <td>Min gain score%:</td> <td style="text-align: right;">-2</td> </tr> <tr> <td>Avg gain score %</td> <td style="text-align: right;">36</td> </tr> <tr> <td>Std Dev:</td> <td style="text-align: right;">46</td> </tr> </table> <p>It should be noted that the wide deviation in domain gain scores can be attributed to students discounting the value of the exams and thereby providing invalid answers either in the entry class, exit class, or both.</p>			Student Count:	15	Max gain score %:	154	Min gain score%:	-2	Avg gain score %	36	Std Dev:	46
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Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 1.			Met										
Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)													
<p>A strategy the program took to raise domain scores was to create and offer new courses on a regular basis. In the fall of 2014, the program offered 14 sections. In the fall of 2019, the program offered 28 sections, including 11 new (On Demand) courses:</p> <p>CIT 302. WEB DEVELOPMENT CIT 352. DATABASE ADMINISTRATION II CIT 372. TELECOMMUNICATIONS II CIT 412. ADVANCED SYSTEMS ARCHITECTURE I CIT 414. ADVANCED SYSTEMS ARCHITECTURE II</p>													

CIT 432. ADVANCED SYSTEMS DEVELOPMENT I
 CIT 456. SYSTEMS ANALYSIS & DESIGN I
 CIT 458. SYSTEMS ANALYSIS & DESIGN II
 CIT 472. ADVANCED TELECOMMUNICATIONS I
 CIT 486. KNOWLEDGE MANAGEMENT
 CIT 492. TECHNOLOGY MANAGEMENT I

Another strategy the program took to raise domain scores was to hire a full-time faculty member, which replaced adjunct instruction in 300-level CIT courses.

Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)

Because the program did not collect student learning outcome data before it was transitioned from University College to Ogden, and because it took several years to develop the capstone class and get students through that pipeline, there is no follow-up data yet available.

Student Learning Outcome 2

Student Learning Outcome	Examination of student mastery of CIT technical domains												
Measurement Instrument 1	DIRECT measure of student learning: It is difficult to draw specific conclusions about individual CIT domain assessment scores since different students take different electives that may or may not support learning in a specific domain. Even so, a significant change in an individual domain assessment score average could indicate issues in that domain's curriculum or delivery. As a result, we also validate student mastery of the CIT technical domains through a satisfactory individual CIT technical domain assessment averages.												
Criteria for Student Success	For success, a minimum average gain score for any specific domain will be greater than 15%.												
Program Success Target for this Measurement	The lowest individual domain percentage gain score was 21%, which exceeds target.	Percent of Program Achieving Target	All domain assessments averaged better than a 15% gain score.										
Methods	<p>For the 201810 through 201910 period, 15 students completed AMS490, and all of them completed six domain assessments including database, hardware, networks, programming, security, and technology management. These scores were then compared to the student's entry assessments in CIT300. Percentage gain scores were calculated for each domain:</p> <table style="margin-left: 40px;"> <tr> <td>Domain Count:</td> <td style="text-align: right;">6</td> </tr> <tr> <td>Max gain score %:</td> <td style="text-align: right;">69</td> </tr> <tr> <td>Min gain score %:</td> <td style="text-align: right;">21</td> </tr> <tr> <td>Avg gain score %:</td> <td style="text-align: right;">36</td> </tr> <tr> <td>Std Dev:</td> <td style="text-align: right;">21</td> </tr> </table>			Domain Count:	6	Max gain score %:	69	Min gain score %:	21	Avg gain score %:	36	Std Dev:	21
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Max gain score %:	69												
Min gain score %:	21												
Avg gain score %:	36												
Std Dev:	21												
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.			Met										
			Not Met										

Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)

A strategy the program took to raise domain scores was to create and offer new courses on a regular basis. In the fall of 2014, the program offered 14 sections. In the fall of 2019, the program offered 28 sections, including 11 new (On Demand) courses:

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