

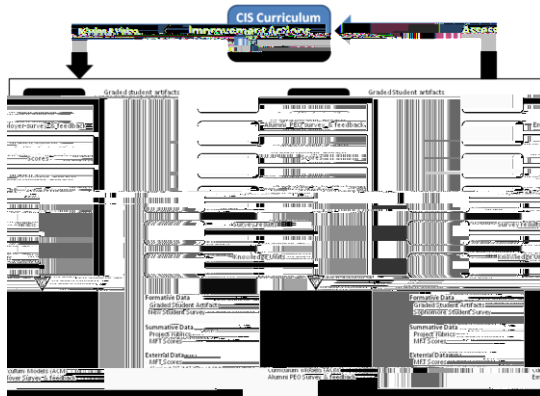
# Annual Report for Assessment

Department of Computer and Information Sciences

Academic Year 2016-17

Date due \_\_\_\_\_

Date received \_\_\_\_\_



shown above.

## CIS Department Assessment Flowchart

programs occurs by collecting pertinent data, gathering input from stakeholders, setting appropriate goals, then systematically reviewing how well the programs meet those

to meet that end. The CIS Department assessment schema is

**List or attach the student learning objectives being assessed this year.**

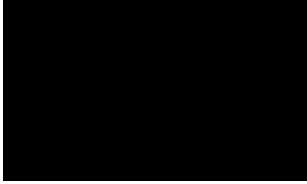
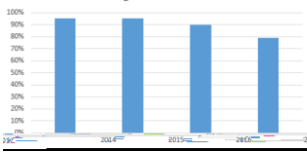

The 10 student learning objectives (outcomes) for the SBU Computer Information Science degree

- 1. List assessment tools implemented this year related to your student learning objectives and the findings from each. When appropriate, show results from all three types of assessment (*1. Students assessing the program, 2. Program assessing the students, and 3. Program comparison to other programs or national comparisons.*) Attach samples of any non-standardized tools that you used.**

**Student Outcomes**

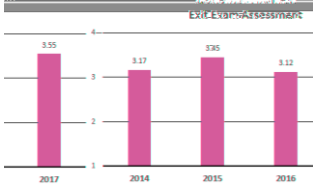
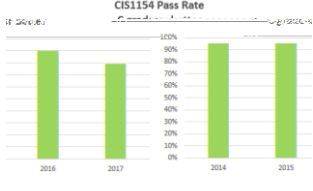
**Show any data gathered and analyze the assessment results.**

Each student learning objective (outcome) and the assessment practices associated with the student outcome are shown below.

<b>Student Learning Objective (SO) 1:</b> <b>An ability to apply knowledge of computing and mathematics appropriate to the discipline.</b> Educational Strategies from Table 1: 1144, 1154, 3333												
Assessment Process	Expected Attainment	Results Summary	Data Collection	Analysis								
<b>External/ Summative:</b> Major Field Test	Institutional Score $\geq$ 50 <sup>th</sup> percentile		Annual	Computer Information science graduates perform well on the major field test consistently scoring as a group above the national average.								
<b>Internal/ Formative</b> CIS1154 Pass Rate	70% of students should pass CIS1154 with a C or better (CIS1154 is the prerequisite for a majority of CIS courses)	 <table border="1"> <caption>CIS1154 Pass Rate C grade or better</caption> <thead> <tr> <th>Year</th> <th>Pass Rate (%)</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>~95</td> </tr> <tr> <td>2015</td> <td>~90</td> </tr> <tr> <td>2016</td> <td>~80</td> </tr> </tbody> </table>	Year	Pass Rate (%)	2014	~95	2015	~90	2016	~80	Annual	The data showed continuing success in achieving the expected level of attainment.
Year	Pass Rate (%)											
2014	~95											
2015	~90											
2016	~80											
<b>External/ Summative:</b> (2015 was the first year assessed)	Mean score should $\geq$ 3.0 on 1-5 scale. Given to alumni on alumni advisory board. This group changes yearly.	<b>Year/Mean</b> 2015: 4.5 2016: 4.3	Annual in Fall	Survey results exceeded the expected level of attainment.								
<b>Internal/ Summative:</b> Exit Exam	Mean score should $\geq$ 3.0. Given to seniors in capstone course.		Each Spring	Survey results exceeded the expected level of attainment.								

<b>STUDENT LEARNING OBJECTIVE (SO) 2:</b> <b>An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.</b> Educational Strategies from Table 1: 1144, 1154, 2213, 3333, 4462, 4472				
Assessment Process	Expected Attainment	Results Summary	Data Collection	Analysis
<b>Internal/ Summative:</b> Senior Project Rubric	All teams should receive a mean score $\geq 3$ on <b>Requirements Section</b> of rubric. Note: the target score was $\geq 4$ prior to 2015.		Each Spring	The Requirements Section of the Rubric assesses performance related to <b>problem definition</b> and <b>requirements</b> .
<b>Internal/ Formative</b> CIS1154 Pass Rate	70% of students should pass CIS1154 with a C or better (CIS1154 is the prerequisite for a majority of CIS courses)		Annual	The data showed continuing success in achieving the expected level of attainment.
<b>External/ Summative:</b> Alumni Survey (2015 was the first year assessed)	Mean score should $\geq 3.0$ on a 1-5 scale. Given to alumni on alumni advisory board. This group changes yearly.	<b>Year/Mean</b> 2015: 4.67 2016: 4.10	Annual in Fall	Survey results exceeded the expected level of attainment.
<b>Internal/ Summative:</b> Exit Exam	Mean score should $\geq 3.0$ . Given to seniors in capstone course.		Each Spring	The results, while close, do not exhibit the level of attainment desired. This area remains a continuing topic during curriculum meetings.

**STUDENT LEARNING OBJECTIVE (SO) 3:**  
**An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs**  
 Educational Strategies from Table 1: 1144, 1154, 2213, 3323

Assessment Process	Expected Attainment	Results Summary	Data Collection	Analysis										
<b>Internal/ Summative:</b> Senior Project Rubric	All teams should receive a mean score $\geq 3.0$ on <b>Total Score</b> of the rubric. Note: prior to 2014-15, the target score was 4.0.	 <table border="1"> <caption>Student Outcomes</caption> <thead> <tr> <th>Year</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>2017</td> <td>3.55</td> </tr> <tr> <td>2014</td> <td>3.17</td> </tr> <tr> <td>2015</td> <td>3.95</td> </tr> <tr> <td>2016</td> <td>3.12</td> </tr> </tbody> </table>	Year	Score	2017	3.55	2014	3.17	2015	3.95	2016	3.12	Each Spring	The expected level of achievement was attained.
Year	Score													
2017	3.55													
2014	3.17													
2015	3.95													
2016	3.12													
<b>External/ Summative:</b> Alumni Survey (2015 was the first year assessed)	Mean score should $\geq 3.0$ on a 1-5 scale. Given to alumni on alumni advisory board. This group changes yearly.	<p><b>Year/Mean</b>                      2015: 4.42                      2016: 4.20</p>	Annual in Fall	Survey results exceeded the expected level of attainment.										
<b>Internal/ Formative</b> CIS1154 Pass Rate	70% of students should pass CIS1154 with a C or better (CIS1154 is the prerequisite for a majority of CIS courses)	 <table border="1"> <caption>CIS1154 Pass Rate</caption> <thead> <tr> <th>Year</th> <th>Pass Rate (%)</th> </tr> </thead> <tbody> <tr> <td>2016</td> <td>~85%</td> </tr> <tr> <td>2017</td> <td>~80%</td> </tr> <tr> <td>2014</td> <td>~95%</td> </tr> <tr> <td>2015</td> <td>~95%</td> </tr> </tbody> </table>	Year	Pass Rate (%)	2016	~85%	2017	~80%	2014	~95%	2015	~95%	Annual	The data showed continuing success in achieving the expected level of attainment.
Year	Pass Rate (%)													
2016	~85%													
2017	~80%													
2014	~95%													
2015	~95%													



**STUDENT LEARNING OBJECTIVE (SO) 5:**

**An understanding of professional, ethical, legal, security and social issues and responsibilities**

Educational Strategies from Table 1: 1001, 1033, 2213, 3313, 4462, 4472

**Assessment  
Process**

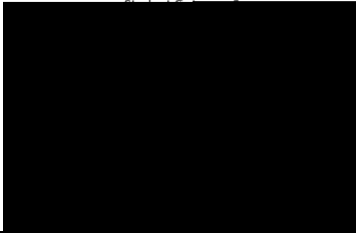

**Expectsta  
Attainment**

**Results Summary**

**Dataa  
Collection**

**Analysis**



<b>STUDENT LEARNING OBJECTIVE (SO) 6:</b>				
<b>An ability to communicate effectively with a range of audiences</b>				
Educational Strategies from Table 1: 1001, 2213, 3313, 4462, 4472				
<b>Assessment Process</b>	<b>Expected Attainment</b>	<b>Results Summary</b>	<b>Data Collection</b>	<b>Analysis</b>
<b>Internal/ Summative:</b> Senior Final Presentation Rubric	All teams should receive a mean score $\geq 3$ on the <b>Presentation Section</b> of rubric		Each Spring	Assessment showed satisfaction of the learning outcome based on the presentation of the senior project.
<b>External/ Summative:</b> Alumni Survey (2015 was the first year assessed)	Mean score should $\geq 3.0$ . Given to alumni on alumni advisory board. This group changes yearly.	<b>Year/Mean</b> 2015: 4.67 2016: 3.9	Annual in Fall	Survey results exceeded the expected level of attainment, this score is lower than expected and will be discussed in the fall assessment meeting.
<b>Internal/ Summative</b> Exit Exam	Mean score should $\geq 3.0$ . Given to seniors in capstone course.		Each Spring	Survey results exceeded the expected level of attainment for the past two years.



**STUDENT LEARNING OBJECTIVE (SO) 8:**  
**Recognition of the need for and an ability to engage in continuing professional development**  
 Educational Strategies from Table 1: 1001, 4462, 4472

<b>Assessment Process</b>	<b>Expected Attainment</b>	<b>Results Summary</b>	<b>Data Collection</b>	<b>Analysis</b>
<b>External/ Summative:</b> Alumni Survey (2015 was the first year assessed)	Mean score should $\geq 3.0$ . Given to alumni on alumni advisory board. This group changes yearly.			

**STUDENT LEARNING OBJECTIVE (SO) 9:**





**5. How were the findings in this report shared with department faculty?**

All findings of this report were shared with department faculty in written and verbal form during the assessment meetings in the fall and spring of 2015-16 and are available electronically to all faculty members on a shared network drive. Some results included in this report from the 2016-17 school year were available and included as well.

**6. Identify the ways in which the following have been made public for your students:**

**Program Goals and Objectives  
Assessment Requirements, and  
Assessment Results.**

The Department mission, vision and program goals (program learning objectives) and learning objectives (student outcomes) are published on the departmental website. This report as well as previous assessment reports are housed in the University Office of Institutional Research. Students may review the reports during normal hours of operation for that office. Students are also made aware of assessment requirements at three points during the curriculum. When students enter the program, they are provided with a copy of the student outcomes in the form of a baseline pretest. In reviewing for the final exam in CIS2213 (end of the sophomore year) students are informed that a portion of the exam will be used for assessment purposes. Students in CIS4472 (end of the senior year) are notified in a similar fashion.