

Academic year 2024-2025

BS in Computer Science - BS-COSC Learning Outcomes

Students will have a solid knowledge of software fundamentals **MET**

MEASURES	RESULTS	ACTIONS
Rubrics of Selected Courses Rubrics of COSC 1336, 1337, 2336, 3302, 4302, 4317, 4340, 4360, and 4272 that use assignments, tests, and projects to assess student performance. pass a course and meet the performance criterion of the course. Direct - Other Target 80% of students are expected to achieve the proficiency outcome 1 results direct.docx	MET Analysis Results: Last year when all targets were met. This year we did not meet criteria 1.5. Indirect measure targets were overall better this year compared to last year with the exception of lower scores for student course evaluations in COSC 1336. This is indicative of a continuing challenge in teaching programming to new students. We will monitor this next year to see if any additional changes are needed.	Other - [Curriculum action] COMPLETE Actions: We discussed the importance of debugging and presenting that information to students. This was discussed with the instructors for COSC 2336 and COSC 2372.
Student Evaluation, Exit Interview, ETS Scores Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4 Indirect - Other Target 80% of students are expected to achieve the proficiency Indirect Measure Results 2024-2025.docx	MET Analysis Discussed in CS Assessment committee meeting and action plan, if any, documented.	<i>No actions have been added.</i>

Conclusion

We discussed in our summer CS Assessment Committee meeting in June 2025 and came up with the needed actions.

Students will be able to demonstrate computer science technology skill **MET**

MEASURES	RESULTS	ACTIONS
Rubrics of Selected Courses Rubrics of COSC 2336, 3302, 4302, 4304, 3308, 4340, and 4317; pass a course and meet the performance criterion of the course.	MET Analysis Criteria 2.1 Results: Last year all direct measure targets were met. This year we missed	Other - [Curriculum action] COMPLETE Criteria 2.1 Actions: We notified the instructors in COSC 2336 regarding criteria 2.1.1. For criteria 2.1.2, we talked to the instructor in COSC 3304 who

<p>Direct - Other</p> <p>Target</p> <p>80% of students are expected to achieve the proficiency</p> <p>outcome 2 results direct.docx</p>	<p>the targets for criteria 2.1.1 and 2.1.2. Indirect measures targets were very positive. In COSC 3304 the instructor mentioned this year's assessment was a challenge as the Registrar had lumped all CS undergraduate students, from all the various CS majors (BSCS, Game Development, Cybersecurity & BSCIS) into one group. The instructor performed the assessment on this wider group.</p> <p>Criteria 2.2 Results: We met all 4 direct measure targets this year which was the same as last year. Student course evaluations for this outcome were also above our target goals.</p> <p>Criteria 2.3 Results: The last two years all direct measure targets were met. This year we did not meet our target in criteria 2.3.5. The assessment for that is in COSC 3308. This instructor for that course was a new Assistant Professor in his first semester at Lamar. It was also his first time teaching the course and he has not taught it previously.</p> <p>Criteria 2.4 Results: All the direct measure targets were met for this outcome with a large sample size of 64.</p> <p>Criteria 2.5 Results: All the direct measure targets were met for this outcome with a sample size of 55.</p> <p>Criteria 2.6 Results: This year all direct measure targets were met like last year. The sample size this year was significant larger this year at 89 compared to 16 last year. All indirect measure results from CPSC 4317 Student Course Evaluation were met. This was a slight improvement since last year one of the 5 targets for student evaluations was not met.</p> <p>Criteria 2.7 Results: Similar to last year, we did not meet the direct target for two of the three performance criteria. Last year we did not meet the target for 2.7.1 (at 74%). We note this year is better at 76% but still slightly below our target. Indirect results are very positive this year - we met all targets.</p>	<p>will ask the Registrar to separate out our program majors (BSCS) from other CS undergraduate programs so we can access our students separately next year.</p> <p>Criteria 2.3 Actions: The department chair will discuss these findings with the instructor in COSC 3308. We expect that instructor to teach the course again next year. We will monitor the results next year to see if any further action plan is needed to improve the results in criteria 2.3.5.</p> <p>Criteria 2.7 Actions: We discussed these results with the instructor.</p>
<p>Student Evaluation, Exit Interview, ETS Scores</p> <p>Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4</p> <p>Indirect - Survey</p>	<p>MET</p> <p>Analysis</p> <p>Discussed in CS Assessment Committee in June 2025 and action plan, if any, documented.</p>	<p><i>No actions have been added.</i></p>

Target 80% of students are expected to achieve the proficiency Indirect Measure Results 2024-2025.docx		
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Conclusion

We discussed in our summer CS Assessment Committee meeting in June 2025 and came up with the needed actions.

Students will be able to employ scientific methods to solve problems **MET**

MEASURES	RESULTS	ACTIONS
Rubrics of Selected Courses Rubrics of COSC 2236, 4317, 4310, and 4272; pass a course and meet the performance criterion of the course. Direct - Other Target 80% of students are expected to achieve the proficiency outcome 3 results direct.docx	MET Analysis Results: This year all direct and indirect target measures were met. Actions: None.	<i>No actions have been added.</i>
Student Evaluation, Exit Interview, ETS Scores Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4 Indirect - Other Target 80% of students are expected to achieve the proficiency Indirect Measure Results 2024-2025.docx	MET Analysis Discussed in CS Assessment Committee in June 2025 and action plan, if any, documented.	<i>No actions have been added.</i>

Conclusion

We discussed in our summer CS Assessment Committee meeting in June 2025 and came up with the needed actions.

Students will have an excellent Societal Awareness. **MET**

MEASURES	RESULTS	ACTIONS
Rubrics of Selected Courses Rubrics of COSC 1172, 3325, 4340, 4317, and 4272; pass a course and meet the performance criterion of the course. Direct - Other Target 80% of students are expected to achieve the proficiency outcome 4 results direct.docx	MET Analysis Results: The results met all direct and indirect (student evaluations and exit interviews) targets. This is the same situation as last year when all targets were also met. Actions: None.	<i>No actions have been added.</i>
Student Evaluation, Exit Interview, ETS Scores Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4 Indirect - Other Target 80% of students are expected to achieve the proficiency Indirect Measure Results 2024-2025.docx	MET Analysis Discussed in CS Assessment Committee in June 2025 and action plan, if any, documented.	<i>No actions have been added.</i>

Conclusion

We discussed in our summer CS Assessment Committee meeting in June 2025 and came up with the needed actions.

Students will grasp and comprehend ethical standards **MET**

MEASURES	RESULTS	ACTIONS
Rubrics of Selected Courses Rubrics of COSC 3325, 4360, 1172, 3325, 4360, and 4272; pass a course and meet the performance criterion of the course. Direct - Other Target 80% of students are expected to achieve the proficiency	MET Analysis Results: Last year our results met all direct and indirect targets. This is the same situation with the exception this year we did not meet the target for criteria 5.2.	Other - [Curriculum action] COMPLETE Actions: The instructor in COSC 3325 is also the department ACM advisor. Since the instructor is relatively new to Lamar, we will inform the instructor about this target. We anticipate this will be an easy addition to the course by the instructor.

outcome 5 results direct.docx		
<p>Student Evaluation, Exit Interview, ETS Scores</p> <p>Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4</p> <p>Indirect - Other</p> <p>Target</p> <p>80% of students are expected to achieve the proficiency</p> <p>Indirect Measure Results 2024-2025.docx</p>	<p>MET</p> <p>Analysis</p> <p>Discussed in CS Assessment Committee in June 2025 and action plan, if any, documented.</p>	<p>No actions have been added.</p>

Conclusion

We discussed in our summer CS Assessment Committee meeting in June 2025 and came up with the needed actions.

Students will be equipped with collaborative work skills **MET**

MEASURES	RESULTS	ACTIONS
<p>Rubrics of Selected Courses</p> <p>pass a course and meet the performance criterion of the course.</p> <p>Rubrics of COSC 4340 and 4360</p> <p>Direct - Other</p> <p>Target</p> <p>80% of students are expected to achieve the proficiency</p> <p>outcome 6 results direct.docx</p>	<p>MET</p> <p>Analysis</p> <p>Results: The targets for the direct measures were all met which is the same as last year. For indirect measures, the targets for questions on course evaluations in CPSC 4340 were not met.</p> <p>Second Cycle Results: Last year we asked the instructor to emphasize teamwork in the course CPSC 4340 based on results from student course evaluations. We were also missing some data from the student course evaluations last year that was did receive this year since we requested those evaluations be updated for this year.</p>	<p>Other - [Curriculum action]</p> <p>COMPLETE</p> <p>Actions: The instructor of CPSC 4340 is retiring this year, so we did not discuss the results with the instructor.</p>
<p>Student Evaluation, Exit Interview, ETS Scores</p> <p>Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4</p> <p>Indirect - Other</p>	<p>MET</p> <p>Analysis</p> <p>Discussed in CS Assessment Committee in June 2025 and action plan, if any, documented.</p>	<p>No actions have been added.</p>

<p>Target</p> <p>80% of students are expected to achieve the proficiency</p> <p>Indirect Measure Results 2024-2025.docx</p>		
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Conclusion

We discussed in our summer CS Assessment Committee meeting in June 2025 and came up with the needed actions.

Students will have strong oral communication skills **MET**

MEASURES	RESULTS	ACTIONS
<p>Rubrics of Selected Courses</p> <p>pass a course and meet the performance criterion of the course. Rubrics of COSC 3325, 4360 and 4272; Indirect - Other</p> <p>Target</p> <p>80% of students are expected to achieve the proficiency</p> <p>outcome 7 results direct.docx</p>	<p>MET</p> <p>Analysis</p> <p>Results: The targets for the performance criteria for direct measures were met for all which is the same as last year. Course evaluation targets were also all met this year which is the same as last year.</p>	<p><i>No actions have been added.</i></p>
<p>Student Evaluation, Exit Interview, ETS Scores</p> <p>Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4 Indirect - Other</p> <p>Target</p> <p>80% of students are expected to achieve the proficiency</p> <p>Indirect Measure Results 2024-2025.docx</p>	<p>MET</p> <p>Analysis</p> <p>Discussed in CS Assessment Committee in June 2025 and action plan, if any, documented.</p>	<p><i>No actions have been added.</i></p>

Conclusion

We discussed in our summer CS Assessment Committee meeting in June 2025 and came up with the needed actions.

Students will have excellent written communication skills **MET**

MEASURES	RESULTS	ACTIONS
Rubrics of Selected Courses Rubrics of COSC 4360 and 4302; pass a course and meet the performance criterion of the course. Direct - Other Target 80% of students are expected to achieve the proficiency outcome 8 results direct.docx	MET Analysis Results: The targets for the performance criteria in Outcome 8 for direct measures were all met which is the same as last year. For indirect measures the measure target for question 34 on the course evaluation in COSC 1172 was not met although it was 3.44 which is very close to our target of 3.75. Targets for this outcome were met in Exit Surveys but not met in Exit Interviews (3.61 with a target of 3.75 on Question 13). The 3.61 was also very close to the target of 3.75. Actions: COSC 1172 is a freshman course. We do not believe an action plan is needed at this time.	<i>No actions have been added.</i>
Student Evaluation, Exit Interview, ETS Scores Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4 Indirect - Other Target 80% of students are expected to achieve the proficiency Indirect Measure Results 2024-2025.docx	MET Analysis Discussed in CS Assessment Committee in June 2025 and action plan, if any, documented.	<i>No actions have been added.</i>

Conclusion

We discussed in our summer CS Assessment Committee meeting in June 2025 and came up with the needed actions.

demonstrate the ability for continuing education and lifelong learning **MET**

MEASURES	RESULTS	ACTIONS
Rubrics of Selected Courses Rubrics of COSC 3325 and 4272; pass a course and meet the performance criterion of the course. Direct - Other Target	MET Analysis Results: The results met all direct targets similar to last year. For indirect results most targets were not met (in course evaluations, Exit Interviews and Exit Surveys). One of two questions on the course evaluations for COSC 4272 did not	<i>No actions have been added.</i>

<p>80% of students are expected to achieve the proficiency</p> <p>outcome 9 results direct.docx</p>	<p>meet the target of 3.75. The score was 3.73 so it was very close.</p> <p>Second Cycle Results: We removed questions 27 and 35 from COSC 4272 indirect measures since the instructor did not cover that material in the course.</p>	
<p>Student Evaluation, Exit Interview, ETS Scores</p> <p>Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4</p> <p>Indirect - Other</p> <p>Target</p> <p>80% of students are expected to achieve the proficiency</p> <p>Indirect Measure Results 2024-2025.docx</p>	<p>MET</p> <p>Analysis</p> <p>Discussed in CS Assessment Committee in June 2025 and action plan, if any, documented.</p>	<p><i>No actions have been added.</i></p>

Conclusion

We discussed in our summer CS Assessment Committee meeting in June 2025 and came up with the needed actions.