



# Course SLO Assessment Report - 4-Column

## El Camino College

### El Camino: Course SLOs (MATH) - Computer Sciences

Course SLOs 1 and ctu.unitid = 757	Assessment Methods & Standard and Target for Success / Tasks	Results	Action & Follow-Up
<p>ECC: CSCI 1 - Problem Solving and Program Design Using C++ - SLO #1 Writing Algorithms - Students will write correct and detailed algorithms. (Properly analyze a problem using top down design, and write an algorithm that can be translated into computer code.)</p> <p><b>Course SLO Assessment Cycle:</b> 2014-15 (Fall 2014)</p> <p><b>Input Date:</b> 11/19/2013</p> <p><b>Course SLO Status:</b> Active</p>	<p><b>Assessment Method Description:</b> Exam/project given during the semester. The topics included writing algorithms for arrays, functions etc. Grading Rubric: 10 points - Concise description of reasonable problem solving technique exists and the progress made from the process is clear from the description. 8 points - description of reasonable problem solving technique exists and the progress made from the process is clear from the description, but could be simplified. 5 points - description of problem solving technique exists, but misses' key details. 3 points - description exists, but at a very basic level 0 points - no description exists Grading was done out of 10 points.</p> <p><b>Assessment Method:</b> Exam/Test/Quiz</p> <p><b>Standard and Target for Success:</b> Score of 80%</p> <p><b>Related Documents:</b> <a href="#">Fall 2014 SLO Report for CSCI 1.docx</a></p>	<p>02/26/2015 - Total students assessed 130 86 students or 66% scored 80% to 100%, 32 students or 25% scored in the range of 60% to 79% and 12 students or 9% scored below 60% on the assessment.</p> <p>Interpretation of results For the students who met the target, I think they communicated well with the instructor, understood class lectures, studied the supporting materials and learned overall art of developing algorithms. About 1/3rd of class did not meet SLO standard of 80 % that was set. That could have been due to combination of factors. Typical factors we have seen hindering student success in community colleges and Computer Science are:</p> <ol style="list-style-type: none"> <li>1. Lack of engagement, due to factor such as Computer Science not being student's major.</li> <li>2. Demanding work and college schedule.</li> <li>3. Borderline success in pre-requisite class or having done such class so long ago that due to lack of use the pre-requisite material has been forgotten.</li> <li>4. Sudden change in student's life condition that required attention and time resources to be redirected from studies towards resolution of such condition.</li> </ol> <p><b>Standard Met? :</b> No</p> <p><b>Semester and Year Assessment Conducted:</b> 2014-15 (Fall 2014)</p> <p><b>Faculty Assessment Leader:</b> Satish Singhal</p> <p><b>Faculty Contributing to Assessment:</b> Satish Singhal, Massoud Ghyam, J L:eon, Sophia Sherif, Dave Akins</p>	<p>09/26/2018 - Action Plan The most important thing we have realized is that 80% or a B- grade set as a success standard is too high for a class such as CSCI 1 because CSCI 1 comprises students from multiple disciplines. Their engagement in class cannot be of same level of the Computer Science students. Thus in future we would lower the success standard to 70%. If distribution in the range 60 to 80% is linear then the success rate rises to about 79% which would be reasonable for the class such as CSCI 1, which is first Computer Science discipline class.</p> <p><b>Action Category:</b> SLO/PLO Assessment Process</p>
<p>ECC: CSCI 16 - Assembly Language - SLO #1 Developing PC Assembly Language Code - Students will design, code, compile, test and document programming solutions to problems by developing PC assembly language code that makes direct use of processor instructions, interrupts, registers, the stack, as well as existing macro and procedure libraries.</p> <p><b>Course SLO Assessment Cycle:</b> 2014-15 (Fall 2014)</p>	<p><b>Assessment Method Description:</b> Students completed multiple (more than three) programming projects, working in the lab and at home on their own computers.</p> <p><b>Assessment Method:</b> Laboratory Project/Report</p> <p><b>Standard and Target for Success:</b> 80% of students will be able to complete and be able to explain the code that they have written.</p> <p><b>Related Documents:</b></p>	<p>02/05/2015 - At the end of the term, there were only 12 students in the class. Two of the students, for whatever reason, did not do the work. Hence, the real data is only for 10 students. Within this group, all 10 demonstrate good knowledge of 80% or more of the material.</p> <p><b>Standard Met? :</b> Yes</p> <p><b>Semester and Year Assessment Conducted:</b> 2014-15 (Fall 2014)</p> <p><b>Faculty Assessment Leader:</b></p>	<p>09/07/2015 - The next time I teach this course, I will have the material set for the entire semester. This semester, it had been 9 years since the course was last offered and the current operating systems that we are using would not allow the use of some of the basic components of assembly language. We need to develop some way of getting around this problem.</p>

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<b>Input Date:</b> 11/19/2013  <b>Course SLO Status:</b> Active	<a href="#">CSCI 1 0134 2014 Fall Pgm01.pdf</a> <a href="#">CSCI 1 0134 2014 Fall Pgm02.pdf</a> <a href="#">CSCI 1 0134 2014 Fall Pgm03.pdf</a>	Ralph Taylor	Also, I will be giving at least 10, and up to 20, quizzes though-out the semester.  <b>Action Category:</b> Teaching Strategies

<p>ECC: CSCI 2 - Introduction to Data Structures - SLO #1 Programming Solutions - Students will design, code, compile, test and document a programming solution to a problem involving the basic data structures: lists, stacks, queues, trees, and related abstract data types.</p> <p><b>Course SLO Assessment Cycle:</b> 2014-15 (Fall 2014)</p> <p><b>Input Date:</b> 11/19/2013</p> <p><b>Course SLO Status:</b> Active</p>	<p><b>Assessment Method Description:</b> The purpose of assessment is to use a stack ,queue and binary search tree class designed to store data in respective data structures and then solve either a palindrome problem or sort and process data in required form.</p> <p>Grading Rubric Designing a solution. This includes you submitting a design document that would include, input, output, and analysis that what algorithms, strategies, class designs would be necessary for software to create an output from given input. 2 Points Coding the above design. 2 Points Compiling the above design and removal of compile, logic, and runtime errors. 2 Points Testing the solution for accuracy and completeness. 2 Points Total Points 8 Points</p> <p><b>Assessment Method:</b> Project</p> <p><b>Standard and Target for Success:</b> Students scoring 70% or higher would have met a successful completion standard for CSCI 2.</p> <p><b>Related Documents:</b> <a href="#">Fall 2014 SLO Report for CSCI 2.docx</a></p>	<p>02/12/2015 - Results Number of students assessed: 41 Table below gives score distributions. Score percentage or range Number of students in that range Percentage of Students in each range (%)</p> <table border="1"> <tbody> <tr> <td>100%</td> <td>9</td> </tr> <tr> <td>22</td> <td></td> </tr> <tr> <td>90 % to &lt;100%</td> <td>13</td> </tr> <tr> <td>32</td> <td></td> </tr> <tr> <td>80% to &lt;90%</td> <td>9</td> </tr> <tr> <td>22</td> <td></td> </tr> <tr> <td>70% to &lt;80%</td> <td>5</td> </tr> <tr> <td>12</td> <td></td> </tr> <tr> <td>60% to &lt;70%</td> <td>1</td> </tr> <tr> <td>2</td> <td></td> </tr> <tr> <td>50% to &lt; 60%</td> <td>1</td> </tr> <tr> <td>2</td> <td></td> </tr> <tr> <td>&lt;50%</td> <td>3</td> </tr> <tr> <td>8</td> <td></td> </tr> <tr> <td>Total 41</td> <td>100</td> </tr> </tbody> </table> <p>Interpretation of results 88% of the students successfully completed the assessment. For the students who met the target, I think they communicated well with the instructor, understood class lectures, studied the supporting materials and learned overall art of developing programs including use of data structures using C++. Instructors experience in teaching CSCI 2 may also have added to student engagement in the class, thus students being productive learners. Twelve percent of students however did not meet the course completion standards. That could have been due to combination of factors. Typical factors we have seen hindering student success in community colleges are:</p> <ol style="list-style-type: none"> <li>1. Lack of engagement.</li> <li>2. Demanding work and college schedule.</li> <li>3. Borderline success in pre-requisite class or having done such class so long ago that due to lack of use the pre-requisite material has been forgotten.</li> <li>4. Sudden change in student's life condition that required attention and time resources to be redirected from studies towards resolution of such condition.</li> </ol>	100%	9	22		90 % to <100%	13	32		80% to <90%	9	22		70% to <80%	5	12		60% to <70%	1	2		50% to < 60%	1	2		<50%	3	8		Total 41	100	<p>09/01/2015 - To support and improve student success, the study materials such as multimedia tools, Powerpoints, and PDF documents on hard to understand topics will be created and will be provided to all professors teaching CSCI 2. The multimedia materials such as videos are hosted on Satish Singhal youtube channel whose link will be provided to all students.</p> <p><b>Action Category:</b> Teaching Strategies</p>
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<p>ECC: CSCI 3 - Computer Programming in Java - SLO #1 Designing, Coding, Compiling and Testing - Students, when given a specification for a program or program segment, will be able to design, code, compile, test and document a solution.</p> <p><b>Course SLO Assessment Cycle:</b> 2014-15 (Fall 2014)</p> <p><b>Input Date:</b> 11/19/2013</p> <p><b>Course SLO Status:</b> Active</p>	<p><b>Assessment Method Description:</b> The students will be assigned a project to develop a full program from specification to final demonstration.</p> <p><b>Assessment Method:</b> Project</p> <p><b>Standard and Target for Success:</b> It is expected that 85% of students will score 75% or above on this SLO.</p> <p><b>Related Documents:</b> <a href="#">CS 3 SLO #1 Assessment Question for Fall 2014.docx</a></p>	<p>02/02/2015 - Of 61 students assessed, 55 scored 75% or above on the project. That is a 90% success rate. This project was the 2nd of 7 projects in the course and was due during the fourth week of the 16 week term. All 6 of the unsuccessful students ended up withdrawing from the course.</p> <p><b>Standard Met? :</b> Yes</p> <p><b>Semester and Year Assessment Conducted:</b> 2014-15 (Fall 2014)</p> <p><b>Faculty Assessment Leader:</b> Gregory L Scott</p> <p><b>Faculty Contributing to Assessment:</b> Esmaail Nikjeh</p>	<p>01/22/2018 - Will review the effectiveness of this assessment tool/method and the relevance of the SLO with faculty.</p> <p><b>Action Category:</b> SLO/PLO Assessment Process</p>