Assessment: Course Four Column

Spring/Summer 2018

El Camino: Course SLOs (MATH) - Computer Sciences

ECC: CSCI 12:Programming for Internet Applications using PHP, JavaScript, and XHTML

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #1 Interactive Web Pages - Design and implement an interactive web page. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2016-17 (Fall 2016), 2017-18 (Spring 2018), 2019-20 (Spring 2020) **Input Date:** 11/19/2013	**Exam/Test/Quiz -** A problem was included on test 1 that asked student to complete a web page with with some interactive component. They were supposed to ask the user for their name and print it back with a greeting message. **Standard and Target for Success:** Based on percentage: It is expected that at least 70% of students will solve the problem with score of 75% or above on this SLO.	**Semester and Year Assessment Conducted:** 2016-17 (Fall 2016) **Standard Met? :** Standard Met 8 completed correctly (7 - 10) 8/11 = 73% Completed 2 Almost Completed (Score 4 - 6) 2/11 = 18% 1 Did not complete (Score 0 - 3) 1/11 = 9% Results show that 73% of the students were able to complete the task successfully, 18% were able to get majority of the task done and 9% were not able to complete the task at a minimum. Analysis shows, majority of the students don't need to do anything, 18% of the remaining students need more practice in writing and using functions in JavaScript and the last 9% needs a lot of work to prepare to be able to complete the task. I plan to include more in class JavaScript exercises in the future classes. (02/03/2017) **Faculty Assessment Leader:** Massoud Ghyam	**Action:** Standards were barely met and I plan to increase javaScript in class exercises and include additional quizzes (including pop quizzes) to increase in students' participation in class. (02/03/2018) **Action Category:** Teaching Strategies **Follow-Up:** Extra assignments were given and student were successful in completing them. (03/18/2019)
	Exam/Test/Quiz - Students are asked to develop a web page to present a form to the user and ask them to complete the from Process data from online forms. **Standard and Target for Success:** It is expected that 70% of students will	**Semester and Year Assessment Conducted:** 2017-18 (Spring 2018) **Standard Met? :** Standard Met Number of Students taking assessment: 21 completed correctly (7 - 10) 76% Completed Almost Completed (Score 4 - 6) 19% Did not complete (Score 0 - 3) 5%	**Action:** Standards were met but I plan to increase javaScript in class exercises by using Canvas's quiz feature, which allows them to get timely feedback on wrong answers. That should help the minority of students that fail to

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	score 70% or above on this SLO.	Results show that 76% of the students were able to complete the task successfully, 19% were able to get majority of the task done and 5% were not able to complete the task at a minimum. Analysis shows, majority of the students don't need to do anything, 19% of the remaining students need more practice in writing and using functions in JavaScript and the last 5% needs a lot of work to prepare to be able to complete the task. I plan to include more in class JavaScript exercises in the future classes. (09/14/2018) **% of Success for this SLO:** 86 **Faculty Assessment Leader:** Massoud Gyham **Faculty Contributing to Assessment:** Massoud Gyham	complete the task. (03/02/2019) **Action Category:** Teaching Strategies **Follow-Up:** JavaScript assignments were increased and students were quizzed on it. It improved student's understanding and the scores improved. (09/03/2019)
SLO #4 Processing Web Data - Design and implement a server-side program or function to a database and interact (insert, delete, update records) with it. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2017-18 (Spring 2018) **Input Date:** 11/19/2013 **Comments::** Not offered in FA17--move to SP18 per Susanne Bucher	**Laboratory Project/Report -** Processing online forms: Write a PHP program to process data from online registration form. The form has fields for email and password. **Standard and Target for Success:** It is expected that 75% of students will score 75% or above on this SLO.	**Semester and Year Assessment Conducted:** 2017-18 (Spring 2018) **Standard Met? :** Standard Met Number of Students taking assessment: 21 completed correctly (7 - 10) 71% Completed Almost Completed (Score 4 - 6) 24% Did not complete (Score 0 - 3) 5% Results show that 71% of the students were able to complete the task successfully, 24% were able to get majority of the task done and 5% were not able to complete the task at a minimum. Analysis shows, majority of the students don't need to do anything, 24% of the remaining students need more practice in writing and using functions in PHP and the last 5% needs a lot of work to prepare to be able to complete the task. I plan to include more in class PHP exercises in the future classes. (09/14/2018) **% of Success for this SLO:** 71 **Faculty Assessment Leader:** Massoud Ghyam **Faculty Contributing to Assessment:** Massoud Ghyam	**Action:** Standards were barely met; I plan to increase PHP in class exercises by using Canvas's quiz feature, which allows them to get timely feedback on wrong answers. That should help the students that failed to complete the task. (03/02/2019) **Action Category:** Teaching Strategies **Follow-Up:** Students were given additional server side exercises to help them better understand PHP. The follow up quizzes showed students were able to improve their scores and about 85% were able to get minimum 70% on the average of all given quizzes. (09/03/2019)

ECC: CSCI 30:Advanced Programming in C++

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #1 Document Programming Solutions - Students will design, code, compile, test and document programming solutions to problems requiring the development of C++ classes (by inheritance, by composition; templates), requiring C++ operator overloading, requiring effective use of the Standard Template Library, requiring effective use of pointers and dynamic memory allocation. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2013-14 (Spring 2014), 2017-18 (Spring 2018) **Input Date:** 11/19/2013	**Laboratory Project/Report -** Three programming assignments were assigned. The first assignment has students creating a class, MyVector, to model what is being done with the Standard Template Library class vector. In this assignment students had to implement C++ operator overloading and make effective use of pointers related to dynamic memory allocation. The second assignment and the third assignment, taken together, were used to demonstrate knowledge of C++ matters related to a C++ inheritance hierarchy. The topics of base classes, derived classes, virtual functions, dynamic memory allocation, and detailed, complete testing of an inheritance hierarchy of classes were covered and students demonstrated their knowledge of these topics. **Standard and Target for Success:** It is expected that 85% of students will demonstrate understanding of and the ability to apply the related C++ concepts. **Related Documents:** CSCI 30 0124 2014 Spring Pgm01 - Delineated Version.doc CSCI 30 0124 2014 Spring Pgm02 Person Student-Voter-Faculty.doc	**Semester and Year Assessment Conducted:** 2013-14 (Spring 2014) **Standard Met? :** Standard Met 22 students performed the assessment. 20 of the 22 performed to the desired standard. Hence, 90.91% did meet the standard, and 2 students or 9.09% did not. Related to the student performance, these lab assignments are very complex and students may use their textbooks, ask question on the material at a general level, and are given plenty of time to complete the programming assignments, generally taking at least a week for a given assignment, and at times as much as three weeks. (09/15/2014) **Faculty Assessment Leader:** Ralph Taylor **Faculty Contributing to Assessment:** Ralph Taylor	**Action:** Continue to provide programming assignments that cover all of the C++ topics related to CSCI 30. The results this semester were very good, but there is the possibility that for the two students who were struggling more could have been done. However, when a student does not take advantage of offers of help via email, possible appointments generally seven days a week, and in the lab environment, I am currently at a loss as to what that "more" would be. (05/15/2018) **Action Category:** Teaching Strategies **Follow-Up:** More quizzes were given to catch as early as possible the students who were struggling. (10/04/2016)

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	CSCI 30 0124 2014 Spring Pgm03 Add StudentVoter.doc **Laboratory Project/Report -** In this project, you will write the implementation of the Map type to use a data structure of your choice. You must not use arrays. You will also implement a couple of algorithms that operate on maps. For this project, implement this Map interface using your choice of data structure (dynamically resizeable array, singly-linked list, doubly-linked list, tree, or hash table). (You must not use any contaner from the C++ library.) For your implementation, if you let the compiler write the destructor, copy constructor, and assignment operator, they will do the wrong thing, so you will have to declare and implement these public member functions as well: Destructor When a Map is destroyed, all dynamic memory must be deallocated. Copy constructor When a brand new Map is created as a copy of an existing Map, a deep copy should be made. Assignment operator When an existing Map (the left-hand side) is assigned the value of another Map (the right-hand side), the result must be that the left-hand side object is a duplicate of the right-	**Semester and Year Assessment Conducted:** 2017-18 (Spring 2018) **Standard Met? :** Standard Met Number of students assessed: 37 31 of the 37 scored 7 or better out of 10, so that 83.78% scored at the generally adequate understanding level. 4 of the 37 scored either a 5 or 6 , so that 10.81% scored at the poor understanding level. 2 of the 37 scored below a 5, so that 5.41% scored at the low understanding level. Average 83% Median 86 For the students who met the target, I think they communicated well with the instructor, understood class lectures, studied the supporting materials and understood C++ inheritance. About 16% of the class did not meet SLO standard of 70 % that was set. As a department we should continue to encourage students to take part in our tutoring services. Other typical factors we have seen hindering student success in community colleges and Computer Science are: 1. Demanding work and college schedule. 2. 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. 4. Sudden change in student's life condition that required attention and time resources to be redirected from studies towards resolution of such condition. (09/14/2018) **% of Success for this SLO:** 84 **Faculty Assessment Leader:** Solomon L Russell **Faculty Contributing to Assessment:** Solomon L Russell	**Action:** Encouraging students to talk to counselors to balance work school schedules. (06/01/2019) **Action Category:** Teaching Strategies **Action:** Encouraging students to take part in the on campus CS tutoring to review concepts from earlier classes early in the semester. (06/01/2019) **Action Category:** Teaching Strategies

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	hand side object, with no memory leak (i.e. no memory from the old value of the left-hand side should be still allocated yet inaccessible). **Standard and Target for Success:** It is expected that 75% of students will score 70% or above on this SLO.		

ECC: CSCI 40:Introduction to UNIX/LINUX Operating Systems

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #1 Shell Script Solutions - Given a specification for a set of operating system tasks, students will create, edit, move, display, copy and delete files and subdirectories. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2013-14 (Spring 2014), 2017-18 (Spring 2018) **Input Date:** 11/19/2013	**Laboratory Project/Report -** lAB 5 - Create subdirectories, move, copy, delete files.(15 pts) __1. Create subdirectories named lab01, lab02,..,lab04, and shells in your home directory. __2. Move all files created in lab01 to the subdirectory lab01: cat.desc hello today cal.jun.03 cal.2003 dir.lab1 __3. a) Similarly, move all files created in lab02-lab04 to their subdirectories. Use wildcards where possible. b) create hard links to mail files and mbox (now in lab02 subdir) in your HOME directory. __4. Copy all files with the extension of .sh , .csh, or .ksh from the /usr/cs40sh dir into your shells directory using a ? or [] in the pattern in the command(s). __5. Use the ls command with the -lR options to list the contents of your HOME and all subdirectories in one command. Print the listing and	**Semester and Year Assessment Conducted:** 2013-14 (Spring 2014) **Standard Met? :** Standard Met SLO1 Results: (total of 18 students) Number of Students Excellent(a score of 14-15 out of 15): 17(94.4%) Satisfactory(a score of 11-13 out of 15): 1(5.6) Unsatisfactory(10 or less out of 15): 0 SLO Conclusion The students performed well enough on this SLO question to support the continuation of the current presentation/delivery methods for this material, which was lecture followed by in class exercise, then the Lab quiz. (08/30/2014) **Faculty Assessment Leader:** Gregory Scott	**Action:** Monitor the success rates for this SLO in future assessments to determine if this extremely high performance is reoccurring, which could indicate that the SLO may need to be revised to make it more challenging. (09/11/2015) **Action Category:** SLO/PLO Assessment Process **Follow-Up:** Looking at the scores from Spring 2016, there were a total of 19 students. 16 students achieved excellent and 1 student achieved satisfactory scores, while 2 students had unsatisfactory levels. That still leads to a percentage of 89% for students achieving 75% or better, which meets the target for success. We should still continue to assess this SLO as is to make sure this target for success continues to be achieved. (09/20/2016)

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	turn it in, along with the commands you used for each step. **Standard and Target for Success:** We expect 85% of the students to receive 75% or better on this question. **Laboratory Project/Report -** Write a shell script system called phonesys that will maintain entries in a user's phonebook. The format of the phonebook records will be: name:phone# (same as in Lab #4) When phonesys is typed at the UNIX prompt, the user will be prompted for the name of his/her phonebook: What is the name of your phonebook? mybook Then, a menu of choices will appear similar to below: Phone book system 1) add an entry 2) delete an entry 3) list file or entry 4) change entry 5) exit system 0 –No understanding The student is unable to create, edit, move, display, copy and delete files and subdirectories and form a shell script. 1 –Some understanding The student is somewhat able to	**Semester and Year Assessment Conducted:** 2017-18 (Spring 2018) **Standard Met? :** Standard Not Met SLO1 Results: (total of 21 students) Number of Students Excellent (a score of 27-30 out of 30): 8(38.1%) Satisfactory (a score of 22-26 out of 30): 4(19.0%) Unsatisfactory (21 or less out of 30): 9(42.9%) SLO Conclusion The students performed well enough on this SLO question to support the continuation of the current presentation/delivery methods for this material, which was lecture followed by in class exercise, then the Lab quiz.I put this question as a homework assignment. It was disappointing to see that 43% of the students had no or little understanding, which showed failure on my part to determine how to properly work the students up to doing the shell script. I presented the topic by first speaking about the topics related to this SLO, then providing some examples that demonstrated how shell scripting works. I will definitely try to be more proactive and spend more time on students that seem to have a hard time grasping the topic. It should also be noted that this assignment used was much more challenging than the previous assignment that has been used in assessing this SLO, as I was looking to see at how students would progress with a more difficult assessment. I will try to find a better problem that's more appropriate for assessing the SLO. As a note, when I measured out the current students with	**Action:** Reconsider the assessment of this SLO with a different problem set that would be more representative> (06/21/2019) **Action Category:** SLO/PLO Assessment Process

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	create, edit, move, display, copy and delete files and subdirectories in forming a shell script. There are numerous bugs that keep the shell script from executing properly. 2 –Most understanding The student is mostly able to create, edit, move, display, copy and delete files and subdirectories in forming a shell script. There are a few bugs that keep the shell script from executing properly. 3- Complete understanding The student is able to create, edit, move, display, copy and delete files and subdirectories and form a shell script that properly executes. **Standard and Target for Success:** We expect 80% of the students to receive 75% or better on this question.	the assignment that was used to assess this SLO in 2013-2014, as well as the follow-up in 2016, 100% of the students received at least 75% or better on this set of questions. (09/09/2018) **% of Success for this SLO:** 57 **Faculty Assessment Leader:** Edwin Ambrosio **Faculty Contributing to Assessment:** Edwin Ambrosio	