Assessment: Course Four Column

Fall 2018

El Camino: Course SLOs (BUS) - Computer Information Systems

ECC: CIS 11:Help Desk Operations

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #2 Help Desk Operations - Identify the major steps in the Incident Management process. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2016-17 (Fall 2016), 2018-19 (Fall 2018) **Input Date:** 05/01/2014	**Case Study -** Students were provided with real life case studies, scenarios and situations where they identified the major steps in the incident management process. Taking advantage of ITIL's recommended Incident Management strategy (which are typically identified as level 1 support the following activities were covered as case study and homework problems): • Incident identification • Incident logging • Incident categorization • Incident prioritization • Initial diagnosis • Escalation, as necessary, to level 2 support • Incident resolution • Incident closure • Communication with the user community throughout the life of the incident **Standard and Target for Success:** It is expected that a minimum of 75%	**Semester and Year Assessment Conducted:** 2016-17 (Fall 2016) **Standard Met? :** Standard Met Total number of students participating: 17 Excellent: 23.53 % (4/17) Good: 52.91 % (9/17) Satisfactory: 23.53% (4/17) Unsatisfactory: 5.88% (0/17) Failing: 0.00% (0/17) 94.12% of the class scored satisfactorily or above. The classroom sharing and discussion of personal and workplace experiences in dealing different incident responses and their management did help clarify and enforce student learning. It should be noted that the students who scored less than satisfactory are also the ones who had attendance problems and/or did not complete homework assignments. (12/06/2016) **Faculty Assessment Leader:** R. Alizadeh	**Action:** Continue to evaluate the case studies and teaching examples assuring to develop new examples regularly. (09/18/2017) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	of the students will score at least satisfactorily (70% or higher) on this SLO. See below for rubric/definition of satisfactory. Excellent: >= 90% Good: >= 80% and < 90% Satisfactory: >= 70% and < 80%% Unsatisfactory: >= 60% and < 70% Failing: < 60%		
	Laboratory Project/Report - Multiple Lab Assignments spread throughout the semester to test student comprehension of the Incident Management process. **Standard and Target for Success:** It is expected that 70% of students will score 70% or above on this SLO.	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Not Met A total of 12 students took this assessment. 4 students (33% students) got between 90% and 100%. 2 students (17% students) got between 80% and 89%. 2 students (17% students) got between 70% and 79%. 2 students (17% students) got between 60% and 69%. 2 students (17% students) got between 0% and 59%. Overall, 8 students (67% students) got 70% or above on this SLO. While students were generally able to comprehend the concept of incident management, there were issues in properly understanding the various approaches involved in the choice of incident management techniques. This is a difficult concept to understand in the sense that real-life work experience is required, and even seasoned Information Technology professionals struggle in choosing the right combination of incident management techniques and their applications. In the future, a guest speaker and/or a field trip to a local company would assist in meeting the standard of this SLO. (12/20/2018) **Faculty Assessment Leader:** J. Siddiqui	**Action:** Students seemed to have trouble in distinguishing between various incident management techniques. More time and effort needs to be dedicated to clarify the concepts and scope of various incidents and their associated issues. (11/08/2019) **Action Category:** Teaching Strategies

ECC: CIS 119:Computer Security and Forensics

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #1 - Demonstrate the knowledge necessary to create a secure computer environment. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2017-18 (Fall 2017), 2018-19 (Fall 2018) **Input Date:** 05/19/2017 **Comments::** New course effective Fall 2017.	**Exam/Test/Quiz -** Students are given a test consisting of true/false and multiple-choice questions relating to the assessed SLO concepts covered in the course textbook. **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students on each question of the assessment will be 70% or higher. See below for rubric/definition of satisfactory. Excellent:>=90% Good:>=80% and <90% Satisfactory:>=70% and <80% Unsatisfactory:>=60% and <70% Failing:<60%	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Met Total number of students participating: 11 Question #7: 91.0% Excellent Question #9: 81.82% Good Question #10: 100.00% Excellent Question #11: 90.91% Excellent Question #12: 90.91% Excellent Five questions were used in this assessment. Out of the 5 questions, students met the standard for all 5 of them. (02/24/2019) **Faculty Assessment Leader:** R. Perkins	**Action:** I will use different questions that will challenge students more for next evaluation. (09/01/2019) **Action Category:** Teaching Strategies **Action:** I will re-evaluate the course curriculum to assure it is up to date with current industry practices, technological advances, and compliances in Cybersecurity. (09/01/2019) **Action Category:** Teaching Strategies **Follow-Up:** The action taken was to re-evaluate the course curriculum to assure it is up to date with current industry practices, technological advances, and compliance in Cybersecurity. This action was implemented Fall 2018. Based of observing the previous assessment in Fall 2017, 4 out of the 5 questions improved to excellent according to the rubric. (03/01/2019)
		Semester and Year Assessment Conducted: 2017-18 (Fall 2017) **Standard Met? :** Standard Met Total number of students participating: 20 Question #7: 100.00% Excellent Question #9: 90.00% Good Question #10: 70.00% Satisfactory Question #11: 85.00% Good Question #12: 85.00% Good	**Action:** I will re-evaluate the course curriculum to assure it is up to date with current industry practices, technological advances, and compliances in Cybersecurity. (03/02/2018) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
		Five questions were used in this assessment. Of the 5 questions, students met the standard for all 5 of them. (03/02/2018) **Faculty Assessment Leader:** R. Perkins	

ECC: CIS 122:Ethical Hacking

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #1 Identify and Analyze Steps - Identify and analyze the steps an ethical hacker would take in order to compromise a target system. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2018-19 (Fall 2018), 2020-21 (Fall 2020) **Input Date:** 03/20/2018	**Laboratory Project/Report -** Students are given a lab project relating to the assessed SLO concepts covered in the course textbook. In this lab, 5 challenge flags should be captured. **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students completing this lab for the assessment will be 70% or higher. See below for rubric/definition of satisfactory. Excellent:>=90% Good:>=80% and <90% Satisfactory:>=70% and <80% Unsatisfactory:>=60% and <70% Failing:<60%	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Met Total number of students of participating: 11 Based on the laboratory project the average score for all students is 83.74% Good The standard for this SLO was met. Most students were able to capture all 5 flags for this lab project but there was three student who only captured 2 flags. (02/24/2019) **Faculty Assessment Leader:** R. Perkins	**Action:** I will re-evaluate the course curriculum to assure it is up to date with current industry practices, technological advances, and compliances in Penetration testing. (02/01/2020) **Action Category:** Teaching Strategies
SLO #2 Identify Tools and Techniques - Identify the tools and techniques used to carry out a penetration testing. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2018-19 (Fall 2018), 2020-21 (Fall 2020) **Input Date:** 03/20/2018	**Laboratory Project/Report -** Students are given a lab project relating to the assessed SLO concepts covered in the course textbook. In this lab, 5 challenge flags should be captured. **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students on each question of the assessment will be 70% or higher. See below for rubric/definition of satisfactory. Excellent:>=90% Good:>=80% and <90%	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Met Total number of students of participating: 11 Based on the laboratory project the average score for all students is 96.36% Excellent The standard for this SLO was met. Out of 11 students 10 students were able to capture all 5 flags. There was 1 student that only captured 3 out of the 5 flags. (02/24/2019) **Faculty Assessment Leader:** R. Perkins	**Action:** I will re-evaluate the course curriculum to assure it is up to date with current industry practices, technological advances, and compliances in Penetration testing. (02/01/2020) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	Satisfactory:>=70% and <80% Unsatisfactory:>=60% and <70% Failing:<60%		
SLO #3 Assess Potential Vulnerabilities - Assess potential vulnerabilities in a network security system within executable programs or within network protocols. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2018-19 (Fall 2018), 2020-21 (Fall 2020) **Input Date:** 03/20/2018	**Exam/Test/Quiz -** Students are given a test consisting of true/false and multiple-choice questions relating to the assessed SLO concepts covered in the course textbook. **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students on each question of the assessment will be 70% or higher. See below for rubric/definition of satisfactory. Excellent:>=90% Good:>=80% and <90% Satisfactory:>=70% and <80% Unsatisfactory:>=60% and <70% Failing:<60%	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Not Met Total number of students of participating: 14 Question #1: 86.00% Good Question #2: 100.00% Excellent Question #3: 79.00% Satisfactory Question #4: 100.00% Excellent Question #5: 93.00% Excellent Question #6: 86.00% Good Question #7: 79.00% Satisfactory Question #8: 93.00% Excellent Question #9: 86.00% Good Question #10: 64.00% Unsatisfactory Ten questions were used in this assessment. Of the 10 questions, students met the standard for 9 of them. Question 10 "Port scanning is a noninvasive, nondestructive, and legal testing procedure that is protected by federal law." The correct answer is "false" Based on Question 10 being Unsatisfactory the standard was not met for this assignment. Question 10 was slightly under the slightly 70% satisfactory rate. (02/24/2019) **Faculty Assessment Leader:** R. Perkins	**Action:** Faculty will spend more time in lecture covering port scanning. (02/01/2020) **Action Category:** Teaching Strategies **Action:** I will re-evaluate the course curriculum to assure it is up to date with current industry practices, technological advances, and compliances in Penetration testing. (02/01/2020) **Action Category:** Teaching Strategies
SLO #4 Understand Basic Techniques - Understand the basic techniques for gaining unauthorized access into a network and computer system using both technical and non-technical means. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2018-19 (Fall 2018), 2020-21 (Fall 2020)	**Laboratory Project/Report -** Students are given a lab project relating to the assessed SLO concepts covered in the course textbook. In this lab, 5 challenge flags should be captured. **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Met Total number of students of participating: 9 Based on the laboratory project the average score for all students is 97.98% Excellent The standard for this SLO was met. Out of 9 students 8	**Action:** I will re-evaluate the course curriculum to assure it is up to date with current industry practices, technological advances, and compliances in Penetration testing. (02/01/2020) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
Input Date: 03/20/2018	students on each question of the assessment will be 70% or higher. See below for rubric/definition of satisfactory. Excellent:>=90% Good:>=80% and <90% Satisfactory:>=70% and <80% Unsatisfactory:>=60% and <70% Failing:<60%	students captured all 5 flags. One student captured 4 out 5 flags. (02/24/2019) **Faculty Assessment Leader:** R. Perkins	

ECC: CIS 13:Computer Information Systems

Course SLOs	Assessment Method Description	Results	Actions
SLO #2 System Development Process - Demonstrate an understanding of the system development process and use of information systems within an organization. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2015-16 (Fall 2015), 2016-17 (Spring 2017), 2017-18 (Fall 2017), 2018-19 (Fall 2018), 2019-20 (Fall 2019), 2020-21 (Fall 2020) **Input Date:** 11/12/2013 **Comments::** Moved FA16 to SP17 per Monica Chaban's 04.04.2017 & Russell Serr's 04.05.2017 e-mails. Will go back to Fall assessments in FA17.	**Exam/Test/Quiz -** Exam developed from textbook material. Assessment Tool 4. In addition to the normal business transaction processing systems, there are also specialty transaction processing systems used by law enforcement, the military, and other organizations. (T/F) 6. In traditional system development, the phases of system development are not carried out in a preset order. (T/F) 7. Information systems are used to support business intelligence (BI). (T/F) 8. Each phase of the ____ produces some type of documentation to pass on to the next phase. a. system analysis c. system implementation b. system development life cycle d. system acquisition 9. A(n) ____ provides regular, routine, and timely information to decision makers. a. transaction processing system b. office system c. general ledger system d. management information	**Semester and Year Assessment Conducted:** 2013-14 (Fall 2013) **Standard Met? :** Standard Met 439 students were assessed. Of the 439: • 100 percentile:187 • 80 percentile 137 students • 60 percentile: 73 students • Below 60 percentile: 42 students 90% met the expectation. Results by question: Statement Percentage Correct 4 93 6 75 7 88 8 66 9 80 Summarize the patterns observed in the data. What were the most important findings from the data? The overall results (90%) are very encouraging, suggesting that most students understand the concepts presented in the assessment. The teaching methodologies utilized accomplished the goals of this SLO. Question 8, the lowest scoring statement was analyzed more closely. Question 8: 66% Correct: This statement challenges the student to identify one component of the system development life cycle (SDLC). The answer choices are very similar causing the student to focus and consider each choice thoughtfully in order to arrive at the correct answer. While most of the students answered this correctly and the	**Action:** A review of question 8 for possible revision. (05/15/2014) **Action Category:** SLO/PLO Assessment Process **Action:** Consider additional instruction concerning SDLC concepts. (05/15/2014) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	system (MIS) **Standard and Target for Success:** It is expected that 60% of the students correctly answer three or more questions. **Exam/Test/Quiz -** Students are given a test consisting of true/false and multiple choice questions relating to the material covered in chapter 12 (Information Systems and Systems Development) of the course textbook. **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students on each question of the assessment will be 70% or higher. See below for rubric/definition of satisfactory. Excellent: >= 90% Good: >= 80% and < 90% Satisfactory: >= 70% and < 80%% Unsatisfactory: >= 60% and < 70% Failing: < 60%	text has ample material on the SDLC, a higher success rate was expected on this question. The data suggests possible revision of the question or additional instruction concerning SDLC concepts. (01/24/2014) **Faculty Assessment Leader:** Gabriella Fernandez **Faculty Contributing to Assessment:** R. Perkins, R. Harris, L. Daniels, G. Fernandez, P. Baumgardner. P. Vacca, R. Barton, J, Thompson, M. Chaban, J. Siddiqui, B. Williams, J. Craig **Semester and Year Assessment Conducted:** 2013-14 (Spring 2014) **Standard Met? :** Standard Not Met Total number of students participating: 371 Excellent Good Satisfactory Unsatisfactory Failing Correct Percent Question 1 19/371 0/371 40/371 53/371 85/371 197/371; 53.1% Question 2 224/371 93/371 17/371 8/371 0/371 342/371; 92.2% Question 3 238/371 93/371 9/371 4/371 0/371 344/371; 92.7% Question 4 176/371 106/371 45/371 0/371 0/371 327/371; 88.1% Question 5 200/371 83/371 34/371 11/371 0/371 328/371; 88.4% Question 6 53/371 53/371 81/371 17/371 46/371 250/371; 67.4% Question 7 40/371 67/371 50/371 74/371 32/371 263/371; 70.8% Question 8 38/371 10/371 41/371 22/371 79/371 190/371; 51.1% Question 9 27/371 70/371 62/371 84/371 21/371 264/371; 71.1% Question 10 144/371 59/371 79/371 29/371 3/371 314/371; 84.6% The overall correct response rate for all students on all questions was 76.0%. Our target, however, was to have each individual question answered correctly by a minimum of 70% of the students assessed. Seven of the ten questions were answered satisfactorily or better (>= 70%),	**Action:** More time needs to be spent explaining the tasks that are required during each phase of the SDLC (systems development life cycle). (12/11/2014) **Action Category:** Teaching Strategies **Action:** A test question will be reworded to replace the acronym TPS with the words Transaction Processing System. (10/01/2014) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
		while the remaining three questions (questions 1, 6 and 8) were not. (08/25/2014) **Faculty Assessment Leader:** Randy Harris **Faculty Contributing to Assessment:** P. Vacca, L. Daniels, J. Thompson, R. Perkins, P. Baumgardner, M. Chaban, J. Siddiqui, J. Craig, R. Barton	
	Exam/Test/Quiz - Students were given a test consisting of true/false and multiple choice questions relating to the material covered in SLO#2 of CIS-13. They were given a total of 10 questions: True/False 1. TPS transactions are typically processed using batch processing. 2. In addition to the normal business transaction processing systems, there are also specialty transaction processing systems used by law enforcement, the military and other organizations. 3. The information that information systems provide is used to support a wide variety of business activities, from day-to-day transactions to long-term strategic planning. 4. Systems development is the process of analyzing a work environment, designing a new system or making modifications to the current system to fit the current needs of that work environment. Multiple Choice 5. When computer systems perform in ways that would be considered intelligent if observed in	**Semester and Year Assessment Conducted:** 2015-16 (Fall 2015) **Standard Met? :** Standard Not Met Total Number of Students: 342 Correct / Incorrect / Percent Correct Question 1: 321 / 21 / 93.86 Question 2: 320 / 22 / 93.48 Question 3: 316 / 26 / 92.54 Question 4: 299 / 43 / 87.28 Question 5: 311 / 31 / 91.00 Question 6: 283 / 59 / 82.68 Question 7: 233 / 109 / 68.00 Question 8: 179 / 163 / 52.33 Question 9: 225 / 117 / 65.88 Question 10: 300 / 42 / 87.86 The overall percentage correct for SLO #2 was 81.49%. However, the target for this SLO is to achieve a minimum of 70% for each question. While seven out of the ten questions met the goal (>=70%), student responses to questions 7, 8, and 9, did not. (12/18/2015) **Faculty Assessment Leader:** A. Lee **Faculty Contributing to Assessment:** All full-time and part-time CIS faculty	**Action:** More time needs to be spent explaining the systems development life cycle (SDLC), and concepts in data analysis and design. (05/10/2016) **Action Category:** Teaching Strategies
		Semester and Year Assessment Conducted: 2014-15 (Fall 2014) **Standard Met? :** Standard Not Met Total number of students participating: 218 Correct / Incorrect / Correct; Percentage	**Action:** A test question will be reworded to replace the acronym TPS with the words Transaction Processing System. (05/05/2015) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results				Actions
	humans, it is commonly referred to as _____. 6. Each phase of the _____ produces some type of documentation to pass on to the next phase. 7. _____ is the phase of system development in which the problem area is studied in depth and the needs of system users are assessed. 8. A(n) _____ is used to describe the characteristics of data used in a database or other type of computer system. 9. For the consumer products division, Acme Corporation is planning to replace the old system with a new one all at once. This is called a _____ conversion. 10. A(n) information system is a collection of elements that interact to generate information needed by the users in an organization. People are one of those elements. Which of the following is/are also an element that makes up an information system? **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students on each question of the assessment will be 70% or higher.	Question 1 85 133 38.99 Question 2 202 16 92.66 Question 3 204 14 93.58 Question 4 178 40 81.65 Question 5 196 22 89.91 Question 6 170 48 77.98 Question 7 157 61 72.02 Question 8 87 131 39.91 Question 9 144 74 66.06 Question 10 190 28 87.16 The overall correct response rate for all students on all questions was 74%. Our target, however, was to have each individual question answered correctly by a minimum of 70% of the students assessed. Eight of the ten questions were answered satisfactorily or better (>= 70%), while the remaining two questions (questions 1 and 8) were not. (01/25/2015) **Faculty Assessment Leader:** J. Siddiqui **Faculty Contributing to Assessment:** All full-time and part-time CIS instructors				**Action:** More time needs to be spent explaining the characteristics of data used in a database. (05/05/2015) **Action Category:** Teaching Strategies
	Exam/Test/Quiz - Students are given a test consisting of true/false and multiple choice questions relating to	**Semester and Year Assessment Conducted:** 2017-18 (Fall 2017) **Standard Met? :** Standard Not Met				**Action:** The faculty agree that the lecture material for Information systems needs to be covered in

Course SLOs	Assessment Method Description	Results	Actions
	the assessed SLO concepts covered in the course textbook. **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students on each question of the assessment will be 70% or higher. See below for rubric/definition of satisfactory. Excellent: >= 90% Good: >= 80% and < 90% Satisfactory: >= 70% and < 80%% Unsatisfactory: >= 60% and < 70% Failing: < 60%	Total number of students participating: 326 Percentage and Number of Correct Responses Question # 7: 91.3% (298/326); Excellent Question #13: 87.5% (285/326); Good Question #15: 83.4% (272/326); Good Question #17: 83.6% (273/326); Good Question #24: 76.3% (249/326); Satisfactory Question #25: 69.4% (226/326); Unsatisfactory Six questions were used in this assessment. Of the 6 questions, students met the standard for 5 of them. Students failed to meet the standard for Question 25, "Hewlett Packard is planning to get rid of its old accounting system, and replace it with a new one all at once. This is called a ____ conversion". The possible answers for this question were "pilot, phased, direct, and parallel". The correct response was "direct". (03/02/2018) **Faculty Assessment Leader:** R. Perkins **Faculty Contributing to Assessment:** Monica Chaban, Randy Harris, Jay Siddiqui, Ken Sims	more depth (09/01/2018) **Action Category:** Teaching Strategies
		Semester and Year Assessment Conducted: 2017-18 (Fall 2017) **Standard Met? :** Standard Not Met Total number of students participating: 326 Percentage and Number of Correct Responses Question # 2: 85.2% (278/326); Good Question # 3: 75.0% (245/326); Satisfactory Question # 4: 85.1% (277/326); Good Question # 6: 82.7% (270/326); Good Question # 8: 87.0% (284/326); Good Question # 9: 91.4% (298/326); Excellent Question # 10: 82.8% (270/326); Good Question # 11: 85.3% (278/326); Good Question # 12: 83.9% (273/326); Good Question # 14: 90.0% (293/326); Excellent Question # 16: 60.3% (197/326); Unsatisfactory Question # 20: 89.6% (292/326); Good	**Action:** The faculty agree that the lecture material for System components and information security needs to be covered in more depth (09/01/2018) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
		Question # 23: 51.3% (167/326); Failing Thirteen questions were used in this assessment. Of the 13 questions, students met the standard for 11 of them. Students failed to meet the standard for Question #16 "Rearranging the data on a hard drive so all the files are stored in contiguous locations is called ____." The possible responses were "disk defragmentation, file compression, disk backup, and disk cleanup" The correct response is "disk defragmentation". Even though the students failed to meet the standard for Question #16, it was an improvement compared to the assessment from last semester (which was 56.6%). Students failed to meet the standard for Question #23 "Collecting in-depth information about an individual, which is generally sold for marketing purposes is known as ____." The possible responses were "personal databasing, identity theft, information piracy, and electronic profiling". The correct response is "electronic profiling but the majority of the students choose identity theft". Even though the students failed to meet the standard for Question 23 it was an improvement compared to the assessment from last semester (which was 40.6%). (03/02/2018) **Faculty Assessment Leader:** R. Perkins **Faculty Contributing to Assessment:** Monica Chaban, Randy Harris, Jay Siddiqui, Ken Sims	
		Semester and Year Assessment Conducted: 2016-17 (Spring 2017) **Standard Met? :** Standard Met Total number of students participating: 288 Percentage and Number of Correct Responses Question # 7: 91.0% (262/288); Excellent Question #13: 94.1% (271/288); Excellent Question #15: 89.2% (257/288); Good Question #17: 78.1% (225/288); Satisfactory Question #24: 72.9% (210/288); Satisfactory Question #25: 73.6% (212/288); Satisfactory (06/08/2017)	**Action:** More time will be spent in lecture to cover the concepts relating to questions 17 and 24. (12/15/2017) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
		Faculty Assessment Leader: R. Harris **Faculty Contributing to Assessment:** M. Chaban, R. Perkins, J. Siddiqui	
	Exam/Test/Quiz - Students are given a test consisting of true/false and multiple choice questions relating to the assessed SLO concepts covered in the course textbook **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students on each question of the assessment will be 70% or higher. See below for rubric/definition of satisfactory. Excellent: >= 90% Good: >= 80% and < 90% Satisfactory: >= 70% and < 80%% Unsatisfactory: >= 60% and < 70% Failing: < 60%	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Not Met Total number of students participating: 229 Percentage and Number of Correct Responses Question # 7: 87.7% (201/229); Good Question #13: 89.6% (205/229); Good Question #15: 87.4% (200/229); Good Question #17: 66.2% (152/229); Unsatisfactory Question #24: 66.9% (153/229); Unsatisfactory Question #25: 58.8% (135/229); Failing Six questions were used in this assessment. Of the 6 questions, students met the standard for 3 of them. Question 17, When a software program is purchased, the buyer is acquiring a(n) ____ that permits him or her to use the software. The possible answers for this question were "software license, copyright, ownership right, software key" The correct response is "Software License" Question 24 A(n) ____ is a collection of elements (people, hardware, software, and data) and procedures that interact to generate information needed by users in an organization. The possible answers for this question were "operating system, device, information system, and utility program" The correct response was "information system" Question 25, "Hewlett Packard is planning to get rid of its old accounting system, and replace it with a new one all at once. This is called a ____ conversion". The possible answers for this question were "pilot, phased, direct, and parallel". The correct response was "direct".	**Action:** Faculty will spend more time lecture covering topics in depth. (09/01/2019) **Action Category:** Teaching Strategies **Follow-Up:** The last action taken was to cover the topics more in depth for the Fall 2018. Looking at the results some areas were improved from the previous year, but we still have to focus more on the topics that did not meet the standard. (02/22/2019)

Course SLOs	Assessment Method Description	Results	Actions
		(02/13/2019) **Faculty Assessment Leader:** R. Perkins **Faculty Contributing to Assessment:** Monica Chaban, Randy Harris, Jay Siddiqui, Khai Lu	
SLO #3 Communications - Identify and analyze existing and emerging technologies and their impact on organizations and society including communication and global relationships. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2015-16 (Fall 2015), 2016-17 (Spring 2017), 2017-18 (Fall 2017), 2018-19 (Fall 2018), 2019-20 (Fall 2019), 2020-21 (Fall 2020) **Input Date:** 11/12/2013 **Comments::** Moved FA16 to SP17 per Monica Chaban's 04.04.2017 & Russell Serr's 04.05.2017 e-mails. Will go back to Fall assessments in FA17.	**Exam/Test/Quiz -** Exam developed from textbook material. Assessment Tool 2. If a government tries to block Internet access, users cannot use a third party located in another country to overcome the block. (T/F) 5. The Internet has provided a marketplace where U.S. citizens may purchase bootleg or illegal copies of movies on DVDs from another country. (T/F) 11. Artificial intelligence systems that carry on written conversations with people in a natural language (such as English, Spanish, Japanese) are called _____. a. chatterbots c. neural networks b. expert systems d. biometric systems 12. _____ is often used to conduct face-to-face interactive meetings between people in different locations. a. Business web conferencing	**Semester and Year Assessment Conducted:** 2013-14 (Fall 2013) **Standard Met? :** Standard Met 439 students were assessed. Of the 439: • 100 percentile:114 • 80 percentile: 152 students • 60 percentile: 108 students • Below 60 percentile: 65 students 85% met the expectation. Results by question: Statement Percentage Correct 2 64 5 65 11 68 12 89 14 78 Summarize the patterns observed in the data. What were the most important findings from the data? The overall results (85%) are very good, and one hundred fourteen (114) students achieved a score of 100%. The teaching methodologies are accomplishing the goals of this SLO. However, the three questions with the lower scores test students suggest students in all CIS 13 classes need more information on emerging technologies and global impact of technology. Students do have a grasp on personal communication technology. These three questions were analyzed more closely. Question 2: 64% Correct: This statement presented the	**Action:** Additional instruction concerning emerging technologies and the global impact of technology. (05/15/2014) **Action Category:** Teaching Strategies **Action:** Review of question 11 for possible revision. (05/15/2014) **Action Category:** SLO/PLO Assessment Process

Course SLOs	Assessment Method Description	Results	Actions
	c. Social networking b. Message boards d. Twitter 14. _____ has enormous potential for providing quality medical care to individuals who live in rural or underdeveloped areas and who do not have access to sufficient medical care. a. Telemedicine c. Broadcasting b. Telecommuting d. Infrared transmission **Standard and Target for Success:** It is expected that 60% of the students correctly answer three or more questions. Students were given a test consisting of true/false and multiple choice questions relating to the material covered in SLO#3 of CIS-13. They were given a total of 10 questions: True/False 1.GPS receivers are commonly used by individuals to determine their geographic location while hiking and to obtain driving directions while traveling. 2.Some monitoring systems in use today use the RFID tags and RFID readers to monitor the status of objects (such as shipping boxes, livestock, or expensive equipment)	student with concepts related to internet access, however the text briefly covers this topic. Therefore the concepts in this statement may need additional instruction in order to achieve higher success. Question 5: 65% Correct: Here students were presented with the concepts of the global impact of technology. The low performance here may have the same causes as question 2. Further instruction on the global impact of technology is needed. Question 11: 68% Correct: The concept of artificial intelligence (AI) is presented in this statement. The text covers this topic by reviewing a variety of different types of AI, but few in great depth. This question may need revision. In addition, possibly additional instruction on this topic is needed. (01/24/2014) **Faculty Assessment Leader:** Gabriella Fernandez **Faculty Contributing to Assessment:** R. Perkins, R. Harris, L. Daniels, G. Fernandez, P. Baumgardner. P. Vacca, R. Barton, J, Thompson, M. Chaban, J. Siddiqui, B. Williams, J. Craig **Semester and Year Assessment Conducted:** 2015-16 (Fall 2015) **Standard Met? :** Standard Not Met Total Number of Students: 342 Correct / Incorrect / Percent Correct Question 1: 337 / 5 / 98.45 Question 2: 319 / 23 / 93.24 Question 3: 296 / 46 / 86.42 Question 4: 261 / 81 / 76.19 Question 5: 182 / 160 / 53.13 Question 6: 319 / 23 / 93.25 Question 7: 300 / 42 / 87.72 Question 8: 146 / 196 / 42.81 Question 9: 275 / 67 / 80.27 Question 10: 193 / 149 / 56.34 The overall percentage correct for SLO #3 was 76.78%.	**Action:** More time needs to be spent on explaining concepts in wireless and satellite communications. (05/10/2016) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	to which the RFID tags are attached. 3.Physicians can use telemedicine to perform remote diagnosis of patients. 4.Communications satellites are space-based devices launched into orbit around the earth to receive and transmit microwave signals to and from earth. Multiple Choice 5.A global positioning system (GPS) consists of ____ and a group of GPS satellites. 6.__ technology is commonly used to monitor the status of objects, such as shipping boxes, livestock, or expensive equipment to which these types of tags are attached. 7.____ is the use of networking technology to conduct real-time, face-to-face meetings between individuals physically located in different places. 8.Some wireless ____ are created by cities or large organizations to provide free or low-cost Internet access to residents of a particular area.	However, the target for this SLO is to achieve a minimum of 70% for each question. While seven out of the ten questions met the goal (>=70%), student responses to questions 5, 8, and 10, did not. (12/18/2015) **Faculty Assessment Leader:** A. Lee **Faculty Contributing to Assessment:** All full-time and part-time CIS faculty **Semester and Year Assessment Conducted:** 2014-15 (Fall 2014) **Standard Met? :** Standard Not Met Total number of students participating: 218 Correct / Incorrect / Percentage Correct Question 1: 215 / 3 / 98.62 Question 2: 204 / 14 / 93.58 Question 3: 171 / 47 / 78.44 Question 4: 171 / 47 / 78.44 Question 5: 109 / 109 / 50.00 Question 6: 205 / 13 / 94.04 Question 7: 180 / 38 / 82.57 Question 8: 103 / 115 / 47.25 Question 9: 29 / 189 / 13.30 Question 10: 104 / 114 / 47.71 The overall correct response rate for all students on all questions was 68.4%. Our target, however, was to have each individual question answered correctly by a minimum of 70% of the students assessed. Six of the ten questions were answered satisfactorily or better (>= 70%), while the remaining four questions (questions 5, 8, 9 and 10) were not. (01/25/2015) **Faculty Assessment Leader:** J. Siddiqui **Faculty Contributing to Assessment:** All full-time and part-time CIS instructors	**Action:** More time needs to be spent explaining the various options and ranges covered by wireless network. (05/05/2015) **Action Category:** Teaching Strategies **Action:** More time needs to be spent explaining the differences between synchronous and asynchronous transmission. (05/05/2015) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	9. In ____ transmission, data is sent at the same time as other related data to support certain types of real-time applications that require the different types of data to be delivered at the proper speed for that application. 10.____ satellites travel at a speed and direction that keeps pace with the earth's rotation, so they appear (from earth) to remain stationary over a given spot. **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students on each question of the assessment will be 70% or higher.		
	Exam/Test/Quiz - Students are given a test consisting of true/false and multiple choice questions relating to the assessed SLO concepts covered in the course textbook. **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students on each question of the assessment will be 70% or higher. See below for rubric/definition of satisfactory. Excellent: >= 90% Good: >= 80% and < 90% Satisfactory: >= 70% and < 80%% Unsatisfactory: >= 60% and < 70%	**Semester and Year Assessment Conducted:** 2017-18 (Fall 2017) **Standard Met? :** Standard Not Met Total number of students participating: 326 Percentage and Number of Correct Responses Question # 2: 85.2% (278/326); Good Question # 3: 75.0% (245/326); Satisfactory Question # 4: 85.1% (277/326); Good Question # 6: 82.7% (270/326); Good Question # 8: 87.0% (284/326); Good Question # 9: 91.4% (298/326); Excellent Question # 10: 82.8% (270/326); Good Question # 11: 85.3% (278/326); Good Question # 12: 83.9% (273/326); Good Question # 14: 90.0% (293/326); Excellent Question # 16: 60.3% (197/326); Unsatisfactory Question # 20: 89.6% (292/326); Good	**Action:** The faculty agree that the lecture material for System components and information security needs to be covered in more depth (09/01/2018) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	Failing: < 60%	Question # 23: 51.3% (167/326); Failing Thirteen questions were used in this assessment. Of the 13 questions, students met the standard for 11 of them. Students failed to meet the standard for Question #16 "Rearranging the data on a hard drive so all the files are stored in contiguous locations is called ____." The possible responses were "disk defragmentation, file compression, disk backup, and disk cleanup" The correct response is "disk defragmentation". Even though the students failed to meet the standard for Question #16, it was an improvement compared to the assessment from last semester (which was 56.6%). Students failed to meet the standard for Question #23 "Collecting in-depth information about an individual, which is generally sold for marketing purposes is known as ____." The possible responses were "personal databasing, identity theft, information piracy, and electronic profiling". The correct response is "electronic profiling but the majority of the students choose identity theft". Even though the students failed to meet the standard for Question 23 it was an improvement compared to the assessment from last semester (which was 40.6%). (03/02/2018) **Faculty Assessment Leader:** R. Perkins **Faculty Contributing to Assessment:** Monica Chaban, Randy Harris, Jay Siddiqui, Ken Sims	
		Semester and Year Assessment Conducted: 2016-17 (Spring 2017) **Standard Met? :** Standard Not Met Total number of students participating: 288 Percentage and Number of Correct Responses Question # 2: 84.4% (243/288); Good Question # 3: 72.2% (208/288); Satisfactory Question # 4: 87.8% (253/288); Good Question # 6: 77.6% (224/288); Satisfactory Question # 8: 87.2% (251/288); Good Question # 9: 90.6% (261/288); Excellent	**Action:** More time will be spent in lecture to cover the concepts relating to questions 16 and 23. (12/15/2017) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
		Question # 10: 81.2% (234/288); Good Question # 11: 84.4% (243/288); Good Question # 12: 89.2% (257/288); Good Question # 14: 88.2% (254/288); Good Question # 16: 56.6% (163/288); Failing Question # 20: 92.0% (265/288); Excellent Question # 23: 40.6% (117/288); Failing (06/08/2017) **Faculty Assessment Leader:** R. Harris **Faculty Contributing to Assessment:** M. Chaban, R. Perkins, J. Siddiqui	
	Exam/Test/Quiz - Students are given a test consisting of true/false and multiple choice questions relating to the assessed SLO concepts covered in the course textbook **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students on each question of the assessment will be 70% or higher. See below for rubric/definition of satisfactory. Excellent: >= 90% Good: >= 80% and < 90% Satisfactory: >= 70% and < 80%% Unsatisfactory: >= 60% and < 70% Failing: < 60%	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Not Met Total number of students participating: 229 Percentage and Number of Correct Responses Question # 2: 90.9% (214/229); Excellent Question # 3: 83.1% (190/229); Satisfactory Question # 4: 87.1% (199/229); Good Question # 6: 84.8% (194/229); Good Question # 8: 82.2% (188/229); Good Question # 9: 87.8% (201/229); Good Question # 10: 85.2% (195/229); Good Question # 11: 83.9% (192/229); Good Question # 12: 86.4 (198/229); Good Question # 14: 76.4% (175/229); Satisfactory Question # 16: 70.5% (162/229); Satisfactory Question # 20: 88.9% (204/229); Good Question # 23: 58.9% (167/229); Failing Thirteen questions were used in this assessment. Of the 13 questions, students met the standard for 12 of them. Students failed to meet the standard for Question #23 "Collecting in-depth information about an individual, which is generally sold for marketing purposes is known as ____." The possible responses were "personal databasing, identity theft, information piracy, and electronic profiling". The correct response is "electronic profiling but the majority of the students choose identity theft".	**Action:** Faculty will spend more time in lecture covering topics in depth. (09/01/2019) **Action Category:** Teaching Strategies **Follow-Up:** The last action taken was to cover the topics more in depth for the Fall 2018. Looking at the results we improved question 16 to 70.5% from 60.3%, which is now meeting the standard. We also made improvements to question 23 but we still have to focus more to improve the results. (02/22/2019)

Course SLOs	Assessment Method Description	Results	Actions
		Even though the students failed to meet the standard for Question 23 it was an improvement compared to the assessment from last semester (which was 51.28%). (02/13/2019) **Faculty Assessment Leader:** R. Perkins **Faculty Contributing to Assessment:** Monica Chaban, Randy Harris, Jay Siddiqui, Khai Lu	
SLO #4 Networking - Demonstrate knowledge of network configurations, risk management and security protocols. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2015-16 (Fall 2015), 2016-17 (Spring 2017), 2017-18 (Fall 2017), 2018-19 (Fall 2018), 2019-20 (Fall 2019), 2020-21 (Fall 2020) **Input Date:** 11/12/2013 **Comments::** Moved FA16 to SP17 per Monica Chaban's 04.04.2017 & Russell Serr's 04.05.2017 e-mails. Will go back to Fall assessments in FA17.	**Exam/Test/Quiz -** Exam developed from textbook material. Assessment Tool 3. A firewall is a security system that essentially creates a barrier between a computer or network and the Internet in order to protect against unauthorized access. (T/F) 15. A ____ provides a secure private tunnel from the user's computer through the Internet to another destination and is most often used to provide remote employees with secure access to a company network. a. laptop private network c. tunnel private network b. USB private network d. virtual private network 16. A ____ network uses a central device to connect each device to the network. a. star c. bus b. ring d. mesh 17. Which protocol can safely be used to transmit sensitive information, such as credit card numbers? a. ftp c. https b. http d. tcp	**Semester and Year Assessment Conducted:** 2013-14 (Fall 2013) **Standard Met? :** Standard Met 439 students were assessed. Of the 439: • 100 percentile: 95 • 80 percentile 152 students • 60 percentile: 120 students • Below 60 percentile: 72 students 84% met the expectation. Results by question: Statement Percentage Correct 3 96 15 57 16 47 17 79 18 81 Summarize the patterns observed in the data. What were the most important findings from the data? The overall result was very good (84%). The teaching methodologies employed are accomplishing most of the goals of this SLO. Given the results for questions 15 and 16, the data patterns suggests all CIS 13 classes need additional instruction on networking. Students do have a grasp on security protocols. The two statements with the lowest scores were analyzed more closely. Question 15: 57% Correct: This statement presented the	**Action:** Additional instruction on networking. (05/15/2014) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	18. Digital signatures _____ _. a. may help prevent online fraud c. can help ISPs block phishing e-mails b. authenticate email d. all of the above **Standard and Target for Success:** It is expected that 60% of the students correctly answer three or more questions. **Exam/Test/Quiz -** Students were given a test consisting of true/false and multiple choice questions relating to the material covered in SLO#4 of CIS-13. They were given a total of 10 questions: True/False 1.Client-server networks are frequently referred to as peer-to-peer networks. 2.Transferring data from a client PC to a server is referred to as downloading. 3.A firewall is a security system that creates a barrier between a computer or network and the Internet in order to protect against unauthorized access. 4.Writing a computer virus or other type of malware or even posting the	student with concepts related to network security. Secure network connections are briefly covered in the text. Students need more information on secure network connections. Question 16: 47% Correct: Here students were presented with the topic of network hardware configuration. The text provides ample material on this subject however, the low performance indicates presentation on network topologies needs an approach that clarifies and explains the topic in a manner that will enable students to grasp this subject more successfully. (01/24/2014) **Faculty Assessment Leader:** Gabriella Fernandez **Faculty Contributing to Assessment:** R. Perkins, R. Harris, L. Daniels, G. Fernandez, P. Baumgardner. P. Vacca, R. Barton, J, Thompson, M. Chaban, J. Siddiqui, B. Williams, J. Craig **Semester and Year Assessment Conducted:** 2015-16 (Fall 2015) **Standard Met? :** Standard Not Met Total Number of Students: 342 Correct / Incorrect / Percent Correct Question 1: 209 / 133 / 61.11 Question 2: 219 / 123 / 63.95 Question 3: 338 / 4 / 98.72 Question 4: 225 / 117 / 65.74 Question 5: 260 / 82 / 76.05 Question 6: 221 / 121 / 64.52 Question 7: 319 / 23 / 93.36 Question 8: 234 / 108 / 68.33 Question 9: 285 / 57 / 83.40 Question 10: 231 / 111 / 67.63 The overall percentage correct for SLO #4 was 74.28%. However, the target for this SLO is to achieve a minimum of 70% for each question. While four out of the ten questions met the goal (>=70%), student responses to questions 1, 2,4,6,8, and 10, did not. (12/18/2015) **Faculty Assessment Leader:** A. Lee **Faculty Contributing to Assessment:** All full-time and part-	**Action:** More time needs to be spent on explaining and reinforcing concepts in computer networks and security. (05/10/2016) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	malware code on the Internet is not illegal, but it is considered highly unethical and irresponsible behavior. 5.Denial of service attacks are usually of insignificant cost in terms of business lost. Multiple Choice 6.A ____ is a network that covers a relatively small geographical area, such as a home, office building, or school. 7.____ refers to the amount of data that can be transferred (such as over a certain type of networking medium) in a given time period. 8.____ is a wireless standard that is designed for very short-range (10 meters, approximately 33 feet, or less) connections. 9.A network adapter, also called a ____ when it is in the form of an expansion card, is used to connect a computer to a network. 10.____ includes any acts of malicious destruction to a computer or computer resource. **Standard and Target for Success:** It is expected that the "correct"	time CIS faculty **Semester and Year Assessment Conducted:** 2014-15 (Fall 2014) **Standard Met? :** Standard Not Met Total number of students participating: 218 Correct Incorrect Percentage Correct Question 1 116 102 53.21 Question 2 131 87 60.09 Question 3 216 2 99.08 Question 4 121 97 55.50 Question 5 138 80 63.30 Question 6 134 84 61.47 Question 7 195 23 89.45 Question 8 116 102 53.21 Question 9 195 23 89.45 Question 10 137 81 62.84 The overall correct response rate for all students on all questions was 68.8%. Our target, however, was to have each individual question answered correctly by a minimum of 70% of the students assessed. Three of the ten questions were answered satisfactorily or better (>= 70%), while the remaining seven questions (questions 1, 2, 4, 5, 6, 8 and 10) were not. (01/25/2015) **Faculty Assessment Leader:** J. Siddiqui **Faculty Contributing to Assessment:** All full-time and part-time CIS instructors	**Action:** More time needs to be spent explaining the various issues involved in Computer Security. (05/05/2015) **Action Category:** Teaching Strategies **Action:** More time needs to be spent explaining the concept of client-server networking. (05/05/2015) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	response percentage rate for all students on each question of the assessment will be 70% or higher.		
	Exam/Test/Quiz - Students are given a test consisting of true/false and multiple choice questions relating to the assessed SLO concepts covered in the course textbook. **Standard and Target for Success:** It is expected that the "correct" response percentage rate for all students on each question of the assessment will be 70% or higher. See below for rubric/definition of satisfactory. Excellent: >= 90% Good: >= 80% and < 90% Satisfactory: >= 70% and < 80%% Unsatisfactory: >= 60% and < 70% Failing: < 60%	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Met Total number of students participating: 229 Percentage and Number of Correct Responses Question # 1: 93.3% (214/229 Excellent Question # 5: 96.7% (222/229); Excellent Question #18: 86.1% (197/229); Good Question #19: 79.0% (181/229); Satisfactory Question #21: 72.3% (166/229); Satisfactory Question #22: 87.8% (201/229); Excellent Six questions were used in this assessment. Of the 6 questions, students met the standard for 6 of them. (02/13/2019) **Faculty Assessment Leader:** R. Perkins **Faculty Contributing to Assessment:** Monica Chaban, Randy Harris, Jay Siddiqui, Khai Lu	**Action:** Faculty will continue to teach this area in depth and keep up with current changes in industry changes/ developments so that the standard will continue to be met. (09/01/2019) **Action Category:** Teaching Strategies **Follow-Up:** The last action taken was to cover the topics more in depth for the Fall 2018. Looking at the results we were able to improve in the one area that we did not meet the standard in last year. (02/22/2019)
		Semester and Year Assessment Conducted: 2017-18 (Fall 2017) **Standard Met? :** Standard Not Met Total number of students participating: 326 Percentage and Number of Correct Responses Question # 1: 89.0% (290/326); Good Question # 5: 94.2% (307/326); Excellent Question #18: 86.4% (282/326); Good Question #19: 73.4% (239/326); Satisfactory Question #21: 66.5% (217/326); Unsatisfactory Question #22: 95.2% (310/326); Excellent Six questions were used in this assessment. Of the 6 questions, students met the standard for 5 of them. Students failed to meet the standard for Question #21 "To	**Action:** The faculty agree that the lecture material for System components needs to be covered in more depth. (09/01/2018) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
		keep a desktop computer or a server powered up when the electricity goes off in addition to protecting against power fluctuations, a(n) ____, which contains a built-in battery, can be used.". The possible answers were "UPS, Surge suppressor, Voltage controller, and Voltage meter". The correct response is UPS. Even though the students failed to meet the standard for Question 21 it was an improvement compared to the assessment from last semester (which was 53.1%). (03/02/2018) **Faculty Assessment Leader:** R. Perkins **Faculty Contributing to Assessment:** Monica Chaban, Randy Harris, Jay Siddiqui, Ken Sims	
		Semester and Year Assessment Conducted: 2016-17 (Spring 2017) **Standard Met? :** Standard Not Met Total number of students participating: 288 Percentage and Number of Correct Responses Question # 1: 87.2% (251/288); Good Question # 5: 94.8% (273/288); Excellent Question #18: 87.5% (252/288); Good Question #19: 59.7% (172/288); Failing Question #21: 53.1% (153/288); Failing Question #22: 95.8% (276/288); Excellent (06/08/2017) **Faculty Assessment Leader:** R. Harris **Faculty Contributing to Assessment:** M. Chaban, R. Perkins, J. Siddiqui	**Action:** Question 21 will be re-worded in order to make it more clear. (12/15/2017) **Action Category:** SLO/PLO Assessment Process **Action:** More time will be spent in lecture to cover the concepts relating to question 19. (12/15/2017) **Action Category:** Teaching Strategies

ECC: CIS 133:Mashup JavaScript, jQuery and AJAX

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #2 Incorporating Data in Client-Side Programs - Students will demonstrate their ability to incorporate client side data storage and transmission techniques using cookies, hidden form fields, querystrings, eXtensible Markup language (XML), JavaScript Object Notation (JSON), and Asynchronous JavaScript and XML (AJAX). **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2015-16 (Fall 2015), 2018-19 (Fall 2018) **Input Date:** 11/12/2013	**Laboratory Project/Report -** A series of 5 lab assignments during the last half of the semester, designed to test the students ability to design, develop, and implement data transmission and storage programming techniques **Standard and Target for Success:** It is expected that 75% of the students will score 5 points on each of the 5 assignments **Related Documents:** Handout 8_cookies.docx Handout 11_XML.docx Handout 12_JSON Handout.docx Handout 13_ AJAX.docx Handout_6B_Form transmission.pdf CIS133_SLO 2 Assignments.zip	**Semester and Year Assessment Conducted:** 2015-16 (Fall 2015) **Standard Met? :** Standard Met Total number of students completing the course: 19 # of students with 5 points # of students with less than 5 points % of students meeting standard Lab 10 19 2 89% Lab 11a 19 3 84% Lab 11b 19 2 89% Lab 11c 19 1 95% (12/17/2015) **Faculty Assessment Leader:** M. Chaban	**Action:** The newer browser versions are installed in the labs which make Lab 10- cookie debugging difficult to achieve. Three browsers were tested (IE, Chrome, and Firefox) with varying results. In the end, the instructor wrote a special program for the class to use to aid in debugging. For the next class, this lab needs to be modified and the students be given third party cookie debuggers to use. (12/16/2016) **Action Category:** Teaching Strategies
		Semester and Year Assessment Conducted: 2014-15 (Fall 2014) **Standard Met? :** Standard Met Total number of students completing the course: 19 # of students with 5 points # of students with less than 5 points % of students meeting standard JS Lab 6 16 3 84% JS Lab 7 19 0 100% JS Lab 8A 18 1 94% JS Lab 8B 18 1 94% JS Lab 8C 18 1 94% Lab 6 – Form Transmission could be better. The coding techniques for storing and passing form data from page to page is easy, but for retrieving form data, it is quite difficult, as to obtain the transmitted data, parsing techniques and use of the intrinsic javascript object library come into play. I changed the teaching strategy for cookies (JS Lab 7) and the students were able to grasp the concept.	**Action:** Spend more time explaining form transmission parsing techniques using the object library. (12/01/2015) **Action Category:** Teaching Strategies **Action:** Modify COR to allocate more time to data transmission using AJAX, XML and jSON (05/15/2015) **Action Category:** Curriculum Changes

Course SLOs	Assessment Method Description	Results	Actions
		Though I briefly touched on jSON, the students were excited to learn how easy it is to incorporate jSON data into their websites. (02/04/2015) **Faculty Assessment Leader:** M. Chaban	
		Semester and Year Assessment Conducted: 2013-14 (Spring 2014) **Standard Met? :** Standard Met Total number of students completing the course: 17 # of students with 5 points # of students with less than 5 points % of students meeting standard Lab 6B 16 1 94% Lab 8 14 3 82% Lab 11 17 0 100% Lab 12 17 0 100% Lab 13 15 2 88% Lab 8 – data storage techniques using client-side cookies, could be better. The coding techniques for writing cookies is easy, but for retrieving cookies, it is quite difficult, as to decode parsing techniques and use of the javascript object library come into play. (09/05/2014) **Faculty Assessment Leader:** Monica Chaban	**Action:** Spend more time explaining parsing techniques using the object library. (09/30/2014) **Action Category:** Teaching Strategies
	Laboratory Project/Report - A series of 4 lab assignments during the last half of the semester, designed to test the students ability to design, develop, and implement data transmission and storage programming techniques. Lab Handout 9A: Books(xml) Lab Handout 9B: Cars(jSON) Lab Handout 9C: TShirt(AJAX) Lab Handout 10: iRock (managing state) **Standard and Target for Success:** It	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Met # of students in class # of students with maximum points # of students with less than maximum points % of students meeting standard Lab 9A 16 13 3 81 Lab 9b 16 12 4 75 Lab 9c 13 13 0 100 Lab 10 16 14 2 88 All students met the standard. The improvements made from last year in the area of RSS Feeds proved successful in	**Action:** Develop additional practice exercises in asynchronous data transmissions using AJAX and RSS data feeds. (08/26/2019) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	is expected that 75% of the students will score maximum points on each of the assignments **Related Documents:** CIS 133 Assessment Assignments for SLO2.zip	Lab 9c. Though there were planned changes to the overall rubric for this SLO, no changes were made. Instead, teaching methods were modified regarding asynchronous data transmission. These methods were incorporated additional practice exercises. The students who did not attain maximum points did not attempt. (12/14/2018) **Faculty Assessment Leader:** M. Chaban	
		Semester and Year Assessment Conducted: 2016-17 (Fall 2016) **Standard Met? :** Standard Not Met # of students participating # of students with maximum points # of students with less than maximum points % of students meeting standard Lab 9A 13 11 1 85 Lab 9b 13 11 1 85 Lab 9c 13 8 4 62 Lab 10 13 10 2 77 It was discovered late in the semester that 2 students were cheating which affected the rubric. The improvements made from last year in the area of cookie debugging were successful. In this class, some students did not meet the rubric for AJAX, primarily because they could not get a feed from Flickr(new material), because they accessed the Flickr account incorrectly. (02/02/2017) **Faculty Assessment Leader:** M. Chaban	**Action:** Need more instruction on RSS feeds. (08/20/2017) **Action Category:** Teaching Strategies **Action:** The SLO definition and its rubric need to change based on the new material used in web development. (06/09/2017) **Action Category:** SLO/PLO Assessment Process

ECC: CIS 140:Data Communications CISCO 1

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #4 Communications with the Internet - Use microcomputer hardware and software to facilitate communications with the Internet. Describe how microcomputer hardware relates to data communications. Analyze security issues such as protections, detection and correction. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2014-15 (Fall 2014), 2014-15 (Spring 2015), 2015-16 (Fall 2015), 2018-19 (Fall 2018) **Input Date:** 11/12/2013	**Exam/Test/Quiz -** Students were given an objective test which included multiple choice, and a matching simulation with Cisco's Packet Tracer Simulator. They were asked to identify procedures to keep User ID, password, and session contents private when establishing remote CLI connectivity with a switch or router to manage it. They also had to contrast a console line with a network line when use the Command Line Interface as it relates to security. **Standard and Target for Success:** It is expected that 75% of the students will score 70% or higher to meet standards set by Cisco.	**Semester and Year Assessment Conducted:** 2014-15 (Fall 2014) **Standard Met? :** Standard Met The outcome was satisfactory, but we will strive to reach the 90% range. Out of 22 taking the exam 86% of them met the standards that Cisco requires. I think continued focus on the security measures related to the Internet (both wired and wireless) will bring better results. (02/02/2015) **Faculty Assessment Leader:** D. Miller	**Action:** Discuss and illustrate the results of employing Secure Shell, and WPA2 protection on active networks. (09/14/2015) **Action Category:** Teaching Strategies **Action:** Continue to illustrate the effects of worms, viruses, and a Trojan horse as they related to the Internet. (09/14/2015) **Action Category:** Teaching Strategies
	Exam/Test/Quiz - Students were given an objective test which included multiple choice, and a matching simulation with Cisco's Packet Tracer Simulator. Describe how microcomputer hardware relates to data communications. **Standard and Target for Success:** It is expected that 75% of the students will score 70% or higher to meet standards set by Cisco.	**Semester and Year Assessment Conducted:** 2014-15 (Spring 2015) **Standard Met? :** Standard Met I think the outcome was satisfactory. Out of the 16 students taking the exam 82% met the standards that Cisco requires. I think showing the integration and interaction of hardware and software will continue to illustrate the concept. (09/15/2015) **Faculty Assessment Leader:** D. Miller	**Action:** Continue to discuss how microcomputer hardware and software interact to facilitate Internet communication. (05/02/2016) **Action Category:** Teaching Strategies
	Exam/Test/Quiz - Students were given a multiple choice assessment consisting of an exam with questions pertaining to topics for SLO#4. **Standard and Target for Success:** It is expected that 85% of students score 70% or above on the total	**Semester and Year Assessment Conducted:** 2015-16 (Fall 2015) **Standard Met? :** Standard Met Excellent: =63% (19/30) Good: = 23% (7/30) Satisfactory = 6% (2/30) Unsatisfactory= 3% (1/30) Failing = 3%= (1/30)	**Action:** Add additional questions to the assessment reflecting topics covering the Internet of things (IoT). (05/08/2016) **Action Category:** SLO/PLO Assessment Process

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	Excellent: = 90 or above Good: = 80-89 Satisfactory = 70-79 Unsatisfactory=60-69 Failing = <60	93% of students scored at 70% and above for this assessment. (12/20/2015) **Faculty Assessment Leader:** A. Lee	
	Multiple Assessments - Students were given a matching simulation with Cisco's Packet Tracer Simulator, and a multiple choice objective test that required stating methods of accessing the Internet. They were tested on information security measures such as Confidentiality, Integrity, and Availability. **Standard and Target for Success:** It is expected that 75% of the students will score 70 or higher to meet standards set by Cisco.	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Met The outcomes were very satisfactory. Out of 13 students taking the exam 84% met the standards Cisco requires. I think focusing on major vulnerabilities of the three security issues (Confidentiality, Integrity, and Availability), and showing the integration and interaction of hardware and software will continue to illustrate the Internet concepts. (03/10/2019) **Faculty Assessment Leader:** D. Miller	**Action:** Continue to discuss the interaction of hardware and software for purposes of accessing the Internet, and the possible security issues. (08/27/2019) **Action Category:** Teaching Strategies

ECC: CIS 16:Application Development and Programming Using Visual Basic.Net

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #3 Software Development Environment - Identify and describe issues involved with software development including ethical conduct, business strategies, social media use, copyright laws and business practices. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2015-16 (Fall 2015), 2016-17 (Fall 2016), 2018-19 (Fall 2018) **Input Date:** 11/12/2013	**Exam/Test/Quiz -** Students analyzed an existing Visual Basic software application for a Bookstore and were told they were going to be given the assignment to duplicate the software application for sale to another small bookstore owner. Minor changes would occur in graphics, animations, and database fields, but otherwise the software application would be identical and have the same user interface and features. In groups, they analyzed 5 specific features in the software application to determine which features could be duplicated simply by copying the code written in their textbooks. They were to identify the specific code (program and page). In groups, they were asked that if they only had 1 day to duplicate the software application, to describe: 1) the pros and cons of using the textbook code they identified 2) the merits and drawbacks of collaboration using social media, specifically crowdsourcing They then had to answer T/F questions regarding their analysis: 1) A copyright protects artistic work and software development falls into this category 2) Copies may be made of copyrighted work for teaching purposes	**Semester and Year Assessment Conducted:** 2016-17 (Fall 2016) **Standard Met? :** Standard Met # of students participating # of students meeting standard # of students not meeting standard % of students meeting standard Q/A 19 17 2 89% The standard was met. Although ethics is already covered in CIS13 it was a good exercise for this class especially with so much code available on the internet. (02/02/2017) **Faculty Assessment Leader:** M. Chaban **Semester and Year Assessment Conducted:** 2015-16 (Fall 2015) **Standard Met? :** Standard Met Total number of students completing the course: 27 # of students participating # of students meeting standard # of students not meeting standard % of students meeting standard Q/A 24 22 2 92% (12/19/2015) **Faculty Assessment Leader:** M. Chaban	**Action:** The ethics problems should be administered a couple of times during the semester, once at the beginning and again at the end. (08/20/2017) **Action Category:** Teaching Strategies **Action:** All students met the standard. This SLO is already covered in CIS13 and is not appropriate for a programming class. (12/16/2016) **Action Category:** SLO/PLO Assessment Process

Course SLOs	Assessment Method Description	Results	Actions
	3) It is a violation of copyright laws to use code examples without the publishers permission 4) Crowdsourcing can result in communication issues sand possibly missed deadlines 5) Open source software is copyrighted **Standard and Target for Success:** The expected outcome was that the students would understand copyright infringement (covered in CIS13) and issues involved with software collaboration (experienced in the classroom) and 90% would answer the questions correctly.		
	Exam/Test/Quiz - After a lecture involving the risks of copying code from the internet, or other sources, including copyrighted material such as textbooks, students analyzed an existing Visual Basic software application for a Bookstore and were given all the code related to it. They created documentation related to the site architecture (IA diagrams, storyboards, and database designs). They were then told they were going to be given the assignment to create a similar software application for another similar company. Minor changes would occur in graphics, animations, and database fields, but otherwise the software application would be identical and have the same user interface and features. In groups, they were asked to discuss and document the approach they would take:	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Not Met Although ethics was covered twice in the course, not all students understood the risks taken with plagiarism. The students who failed to meet the standard, failed to understand the ethical nature of copying code and the risks involved in doing so. Their solution was to copy the code they were given, make a few changes, and pass it off as original material. (12/14/2018) **Faculty Assessment Leader:** M. Chaban	**Action:** Place more focus on ethics and risks and enhance this assignment. Instead of asking questions regarding the ethical nature of their approach, use this as a class project to see how they actually approach developing the solution, then have a summary report produced covering the questions/variations of the questions listed above. (08/26/2019) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	1) the pros and cons of using the code they were given to complete the new website 2) the merits and drawbacks of crowdsourcing to complete the assignment Individually they then had to answer 5 questions regarding their analysis: 1) A copyright protects artistic work and the approach they submitted falls into this category 2) Can copies be may be made of copyrighted work for teaching and learning purposes 3) Is it a violation of copyright laws to use code examples without the publishers permission 4) Will crowdsourcing result in communication issues sand possibly missed deadlines 5) Was the code they were given open source software and copyrighted **Standard and Target for Success:** The expected outcome was that the students would understand copyright infringement and issues involved with software collaboration and 90% would answer the questions correctly.		

ECC: CIS 19:Internet, Social Networking, and the Web

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #2 Social Media Campaign - Design and develop the plan for a business social media campaign. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2018-19 (Fall 2018) **Input Date:** 03/13/2018	**Laboratory Project/Report -** Multiple Lab Assignments spread throughout the semester to test student comprehension of business social media campaigns. **Standard and Target for Success:** It is expected that 70% of students will score 70% or above on this SLO.	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Not Met A total of 20 students took this assessment. 3 students (15% students) got between 90% and 100%. 8 students (40% students) got between 80% and 89%. 2 students (10% students) got between 70% and 79%. 5 students (25% students) got between 60% and 69%. 2 students (10% students) got between 0% and 59%. Overall, 13 students (65% students) got 70% or above on this SLO. While students were generally able to comprehend the concepts of social media, there were issues in properly designing and developing the plan for a business social media campaign. This is a difficult concept to understand in the sense that real-life work experience is required, and even seasoned Information Technology professionals struggle in choosing the appropriate plan for a business social media campaign. In the future, a guest speaker and/or a field trip to a local company would assist in meeting the standard of this SLO. (12/20/2018) **Faculty Assessment Leader:** J. Siddiqui	**Action:** Students seemed to have trouble in distinguishing between multiple forms of social media and their applications towards a business social media campaign. More time and effort needs to be dedicated to clarify the concepts and scope of various social media networks and their associated issues and applications in a business environment. (11/08/2019) **Action Category:** Teaching Strategies

ECC: CIS 26:Using Microsoft Excel

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #3 Conditional Formatting - Given an in-class assignment, modify an existing spreadsheet to include conditional numeric formatting involving mathematical states (positive, negative and zero), and conditional logic involving day and time calculations. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2014-15 (Fall 2014), 2014-15 (Spring 2015), 2015-16 (Spring 2016), 2018-19 (Fall 2018) **Input Date:** 11/12/2013	**Laboratory Project/Report -** Students are given an assignment to enhance an invoice with external references (VLOOKUPs) to external lists of customers and inventory items. In more rigorous logic operations, they must build nested IF/VLOOKUPs three levels deep, and IF-decisions based on the time of day that orders are received. **Standard and Target for Success:** Based on percentages, it is expected that 60% (or more) of the class will complete the assignment. **Related Documents:** CIS26 PUPPIES 3.xlsx	**Semester and Year Assessment Conducted:** 2014-15 (Spring 2015) **Standard Met? :** Standard Met 79% of the class (19 out of 24 students) completed the assignment. (09/21/2015) **Faculty Assessment Leader:** R. Perkins **Related Documents:** CIS 26Pups3_SP15 SLO 3.xlsx	**Action:** Conditional formatting is assessed in this project along with other assignments throughout the semester. I will use a handout where students must apply various conditional formats to the mathematical state of positive, negative, and zero and I will spend more time during lecture to increase the percentage. (01/19/2016) **Action Category:** Teaching Strategies
		Semester and Year Assessment Conducted: 2014-15 (Fall 2014) **Standard Met? :** Standard Met 94% of the class (17 out of 18 students) completed the assignment. (10/21/2014) **Faculty Assessment Leader:** D. Barton	**Action:** The way the Excel handles and displays the mathematical states of positive, negative, and zero is covered several times in the semester, and is assessed in this project. The 94% completion rate surpasses earlier years, and supports the idea that repeated instruction, in different scenarios, results in better comprehension and retention. (03/24/2015) **Action Category:** Teaching Strategies **Follow-Up:** The VLOOKUP function is also discussed in various cases before this assessment, but students must “reach” in this project in order to return data from external references. The day/time component of the assessment requires students to ascertain the values of the three arguments of

Course SLOs	Assessment Method Description	Results	Actions
			the NOW function, and embed the results in an IF function. This semester's students asked many questions, explored various solutions, and developed a wide variety of solutions. (01/27/2015)
	Laboratory Project/Report - Students are given lab project in which they must modify an existing spreadsheet to include conditional numeric formatting involving mathematical states, and conditional logic involving day and time calculations. **Standard and Target for Success:** It is expected that 85% of the students will score 75% or above on this SLO.	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Not Met 2 students got an A 2 Students got a B 2 Students got a C 3 students failed the SLO. 6 out of 9 students received a C or better. The actual result is that 67% of the students scored 75% or above on this SLO. (02/28/2019) **Faculty Assessment Leader:** N. Ghori	**Action:** I will re-evaluate the course curriculum to assure it is up to date with current industry practices and technological advances (12/12/2019) **Action Category:** Curriculum Changes **Action:** Faculty will spend more time in lecture covering topics in depth. (12/12/2019) **Action Category:** Teaching Strategies
		Semester and Year Assessment Conducted: 2015-16 (Spring 2016) **Standard Met? :** Standard Not Met 53% of the students scored 75% or above on this SLO. Most of the students who didn't score over 75% got the negative format incorrect involving conditional formatting. (03/03/2016) **Faculty Assessment Leader:** R. Perkins	**Action:** I will develop a handout with more conditional formatting examples to give the students more practice. (02/11/2017) **Action Category:** Teaching Strategies

ECC: CIS 28:Database Management using Microsoft Access

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #2 Table Structures - Design, create, and modify table structures and relationships. Modify tables to include default values, validation rules, input masks, and indices. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2013-14 (Spring 2014), 2016-17 (Spring 2017), 2018-19 (Fall 2018) **Input Date:** 11/12/2013	**Exam/Test/Quiz -** Students will be given a practical exam where they start with an empty (no objects) database file. The students will then create new table(s), add fields, modify fields, set primary keys, modify field properties, relate the tables and set referential integrity. **Standard and Target for Success:** It is expected that a minimum of 75% of the students will score at least satisfactorily (70% or higher) on this SLO. See below for rubric/definition of satisfactory. Excellent: >= 90% Good: >= 80% and < 90% Satisfactory: >= 70% and < 80%% Unsatisfactory: >= 60% and < 70% Failing: < 60%	**Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Met Total number of students participating: 23 Excellent: 34.8 % (8/23) Good: 13.0% (3/23) Satisfactory: 39.1% (9/23) Unsatisfactory: 13.0% (3/23) Failing: 0.0% (0/23) 87.0% of the class scored satisfactorily or above. (01/05/2019) **Faculty Assessment Leader:** R. Harris	**Action:** Continue developing multimedia examples and exercises on creating and modifying database tables that lend themselves to different learning styles. (06/07/2019) **Action Category:** Teaching Strategies **Follow-Up:** The refinement of the demonstrations to include additional multimedia elements have continued to result in high success rates. The success rate for this evaluation vs. the last time it was evaluated was 87.0% (current) vs. 88.5% (former). (02/22/2019)
		Semester and Year Assessment Conducted: 2016-17 (Spring 2017) **Standard Met? :** Standard Met Total number of students participating: 26 Excellent: 38.5 % (10/26) Good: 30.8% (8/26) Satisfactory: 19.2% (5/26) Unsatisfactory: 7.7% (2/26) Failing: 3.8% (1/26) 88.5% of the class scored satisfactorily or above. (06/08/2017) **Faculty Assessment Leader:** R. Harris	**Action:** Give additional examples and exercises on creating and modifying database tables. (08/28/2017) **Action Category:** Teaching Strategies **Follow-Up:** The additional lab exercises and examples seemed to have helped as the percentage of “successful” (excellent, good or satisfactory) students increased from 78.25% to 88.5%. (06/29/2017)
		Semester and Year Assessment Conducted: 2014-15 (Fall 2014) **Standard Met? :** Standard Met Total number of students participating: 17 Excellent: 52.94 % (9/17) Good: 29.41% (5/17)	**Action:** As 100% of the class met the standard, more rigorous assignments and evaluation methods will be devised. (05/15/2015)

Course SLOs	Assessment Method Description	Results	Actions
		Satisfactory: 17.65% (3/17) Unsatisfactory: 0.00% (0/17) Failing: 0.00% (0/17) 100.00% of the class scored satisfactorily or above (01/28/2015) **Faculty Assessment Leader:** R. Harris	**Action Category:** Teaching Strategies **Follow-Up:** As expected, student scores remain high. I will be implementing a more in-depth evaluation method for future semesters. (02/09/2015)
		Semester and Year Assessment Conducted: 2013-14 (Spring 2014) **Standard Met? :** Standard Met Total number of students participating: 23 Excellent: 56.5 % (13/23) Good: 13.0% (3/23) Satisfactory: 8.75% (2/23) Unsatisfactory: 8.75% (2/23) Failing: 13.0% (3/23) 78.3% of the class scored satisfactorily or above. (08/07/2014) **Faculty Assessment Leader:** Randy Harris	**Action:** Give additional examples and exercises on creating and modifying database tables. (12/04/2014) **Action Category:** Teaching Strategies

ECC: CIS 40:Personal Computer Support and Networking

Course SLOs	*Assessment Method Description*	*Results*	*Actions*
SLO #2 PC Boot Problems - Students will be able to solve a PC boot problem, given a set of circumstances that occur once the power button is pressed. Using a BIOS software troubleshooting flowchart, they will be able to determine which BIOS process is causing the failure. **Course SLO Status:** Active **Course SLO Assessment Cycle:** 2014-15 (Fall 2014), 2016-17 (Fall 2016), 2018-19 (Fall 2018) **Input Date:** 11/12/2013	**Exam/Test/Quiz -** Student assessments generally consisted of three areas: laboratory assignments, quizzes and exams. In class demonstration and articulation of concepts is also used to assess the student's progress with comprehension. **Standard and Target for Success:** It is expected that 70 % of students score 70% or above on the total. Excellent: =90 or above Good: = 80-89 Satisfactory = 70-79 Unsatisfactory=60-69 Failing = <60		
	Homework Problems - Students were provided with Oracle VM VirtualBox software to install a virtualized Windows 7 operating system and identify and exam its boot process (including CMOS, BIOS and POST related problems). **Standard and Target for Success:** It is expected that a minimum of 75% of the students will score at least satisfactorily (70% or higher) on this SLO. See below for rubric/definition of satisfactory. Excellent: >= 90% Good: >= 80% and < 90% Satisfactory: >= 70% and < 80%%	**Semester and Year Assessment Conducted:** 2016-17 (Fall 2016) **Standard Met? :** Standard Met Total number of students participating: 31 Excellent: 19.35 % (6/31) Good: 61.29 % (19/31) Satisfactory: 12.90 % (4/31) Unsatisfactory: 3.22 % (1/31) Failing: 3.22 % (1/31) 93.56 % of the class scored satisfactorily or above. The additional homework and demonstrations on installing and running virtual Windows OS and examination of its boot and POST process did help increase success rates. It should be noted that the students who scored less than satisfactory are also the ones who had attendance	**Action:** Re-evaluate the need for additional homework assignments as they have proven to increase comprehension. (09/18/2017) **Action Category:** Teaching Strategies **Action:** Continue to follow current developments and advances in the industry assuring the class studies are up to date. (09/18/2017) **Action Category:** Teaching Strategies

Course SLOs	Assessment Method Description	Results	Actions
	Unsatisfactory: >= 60% and < 70% Failing: < 60% **Project -** Students are given a project where given a set of problems, they are to identify the potential causes and solutions of the problems. Additionally, students are to create a flow chart with various PC startup problems and solutions to those problems. **Standard and Target for Success:** It is expected that 75% of the students will score 70% or above on this SLO. **Related Documents:** CIS 40 Project SLO 2.zip CIS 40 Project SLO 2 Rubric.pdf	problems and/or did not complete homework assignments. (12/06/2016) **Faculty Assessment Leader:** R. Alizadeh **Semester and Year Assessment Conducted:** 2018-19 (Fall 2018) **Standard Met? :** Standard Met Total number of students participating: 16 Excellent: 50.00% (8/16) Good: 6.25 % (1/16) Satisfactory: 25.00% (4/16) Unsatisfactory: 12.50 % (2/16) Failing: 6.25 % (1/16) 93.75 % of the class scored satisfactorily or above. Note that 2 students in this class chose not to do the assignment and received a 0 on the project. These students scores were not counted as participating. (02/05/2019) **% of Success for this SLO:** 80 **Faculty Assessment Leader:** Khai Lu	**Action:** Continue to follow current developments and update the assignment based on current technologies and best practices in the industry (12/18/2019) **Action Category:** Teaching Strategies