<table>
<thead>
<tr>
<th>Course SLOs</th>
<th>Assessment Methods &amp; Standard and Target for Success / Tasks</th>
<th>Results</th>
<th>Action &amp; Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Camino: Course SLOs (BUS) - Computer Information Systems - ECC: CIS 13 - Computer Information Systems - SLO #1 Applicability - Solve common business problems using appropriate information technology applications and systems design and developmental tools. (Created By El Camino: Course SLOs (BUS) - Computer Information Systems)</td>
<td><strong>Assessment Method Description:</strong> Exam developed from textbook material: Related Documents: Assessment Tool 1. A clerk in a video store may need to determine if a particular movie is available for rental and, if not, when it is due to be returned. The type of software used for such tasks is a database management system. (T/F) 10. ___________ illustrate the activities that are part of a system as well as data flowing into and out of each activity. a. Decision tables. b. Data flow diagrams 13. Class diagrams and case diagrams are used to illustrate systems based on the concept of ______. a. procedures. b. entities 19. Businesses and many individuals often use office suites, sometimes called ______, to produce written documents. a. integral suites. b. mid-range suites. c. productivity software. d. corporate suites. 20. Some mobile software programs are designed to be compatible with popular _____ to facilitate sharing documents between the two platforms. a. Web-based software. b. desktop software.</td>
<td>01/24/2014 - 429 students were assessed. Of the 429: • 100 percentile: 30 • 80 percentile: 77 students • 60 percentile: 151 students • Below 60 percentile: 171 students 60% met the expectation.</td>
<td>05/15/2014 - The assessment should be reviewed and revised, specifically question 13 as this was the question most students answered incorrectly most often. <strong>Action Category:</strong> SLO Assessment Process</td>
</tr>
<tr>
<td>2014-15 (Fall 2014) 2016-17 (Fall 2016)</td>
<td><strong>Results by question:</strong> Statement Percentage Correct 191</td>
<td>05/15/2014 - Additional instruction concerning application software. <strong>Action Category:</strong> Teaching Strategies</td>
<td></td>
</tr>
<tr>
<td>Input Date: 11/12/2013</td>
<td>1080</td>
<td>05/15/2014 - Additional instruction concerning system design and development tools. <strong>Action Category:</strong> Teaching Strategies</td>
<td></td>
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<td>Course SLO Status: Active</td>
<td>1325</td>
<td>06/12/2014 6:24 PM</td>
<td>Generated by TracDat a product of Nuventive.</td>
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<td>approach that clarifies and explains these terms and the concept of objects in a manner that will allow more students to successfully grasp the concept.</td>
<td></td>
<td>05/15/2014 - A review of question 8 for possible revision.</td>
</tr>
<tr>
<td></td>
<td>Question 19: 44% Correct: Here students were presented with the task of identifying another term for office suite. While the answer choices were similar, the underperformance on this question suggests students did not spend time carefully reviewing their choices.</td>
<td></td>
<td>Action Category: SLO/PLO Assessment Process</td>
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<tr>
<td></td>
<td>Question 20: 40% Correct: This statement was designed to test the students’ ability to understand synchronization and file sharing between computer platforms. This question may need revision. Additional instruction concerning application software and platforms should be added.</td>
<td></td>
<td>Action Category: Teaching Strategies</td>
</tr>
<tr>
<td></td>
<td><strong>Standard Met? :</strong> Yes</td>
<td></td>
<td>05/15/2014 - Consider additional instruction concerning SDLC concepts.</td>
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<tr>
<td></td>
<td><strong>Semester and Year Assessment Conducted:</strong> 2013-14 (Fall 2013)</td>
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<td></td>
<td><strong>Faculty Assessment Leader:</strong> Gabriella Fernandez</td>
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<td></td>
<td><strong>Faculty Contributing to Assessment:</strong> R. Perkins, R. Harris, L. Daniels, G. Fernandez, P. Baumgardner, P. Vacca, R. Barton, J. Thompson, M. Chaban, J. Siddiqui, B. Williams, J. Craig</td>
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<tr>
<td></td>
<td><strong>Course SLO Assessment Cycle:</strong> 2013-14 (Spring 2014) 2015-16 (Spring 2016)</td>
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<tr>
<td></td>
<td><strong>Input Date:</strong> 11/12/2013</td>
<td></td>
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<td></td>
<td><strong>Course SLO Status:</strong> Active</td>
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</tbody>
</table>

**Assessment Method Description:**
Exam developed from textbook material.

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. system implementation b. system development life cycle. system acquisition

Results by question:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>93</td>
</tr>
<tr>
<td>6</td>
<td>75</td>
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<tr>
<td>7</td>
<td>88</td>
</tr>
<tr>
<td>8</td>
<td>66</td>
</tr>
<tr>
<td>9</td>
<td>80</td>
</tr>
</tbody>
</table>

01/24/2014 - 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.

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
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 system (MIS)

**Assessment Method:**
Exam/Test/Quiz

**Standard and Target for Success:**
It is expected that 60% of the students correctly answer three or more questions.

**Results**
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 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.

**Standard Met?**
Yes

**Semester and Year Assessment Conducted:**
2013-14 (Fall 2013)

**Faculty Assessment Leader:**
Gabriella Fernandez

**Faculty Contributing to Assessment:**

**Assessment Method Description:**
Exam developed from textbook material.

**Assessment Tool**
Exam/Test/Quiz

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
   b. neural networks
   c. expert systems
   d. biometric systems

12. ________________ is often used to conduct face-to-face interactive meetings

**Input Date:**
11/12/2013

**Course SLO Status:**
Active

**01/24/2014 - 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:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>64</td>
</tr>
<tr>
<td>5</td>
<td>65</td>
</tr>
<tr>
<td>11</td>
<td>68</td>
</tr>
<tr>
<td>12</td>
<td>89</td>
</tr>
<tr>
<td>14</td>
<td>78</td>
</tr>
</tbody>
</table>

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

**05/15/2014 - Additional instruction concerning emerging technologies and the global impact of technology.**

**Action Category:**
Teaching Strategies

**05/15/2014 - Review of question 11 for possible revision.**

**Action Category:**
SLO/PLO Assessment Process
between people in different locations.
a. Business web conferencing  
b. Message boards  
c. Social networking  
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  
b. Telecommuting  
c. Broadcasting  
d. Infrared transmission

**Assessment Method:**
Exam/Test/Quiz

**Standard and Target for Success:**
It is expected that 60% of the students correctly answer three or more questions.

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**Question 2:** 64% Correct: This statement presented the 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.

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**Semester and Year Assessment Conducted:**
2013-14 (Fall 2013)

**Faculty Assessment Leader:**
Gabriella Fernandez

**Faculty Contributing to Assessment:**

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**Assessment Method Description:**
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  
b. tunnel private network  
c. USB private network  
d. virtual private

01/24/2014 - 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:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>96</td>
</tr>
<tr>
<td>15</td>
<td>57</td>
</tr>
<tr>
<td>16</td>
<td>47</td>
</tr>
<tr>
<td>17</td>
<td>79</td>
</tr>
</tbody>
</table>

05/15/2014 - Additional instruction on networking.

**Action Category:**
Teaching Strategies
<table>
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</thead>
<tbody>
<tr>
<td>network</td>
<td>16. A ____ network uses a central device to connect each device to the network.</td>
<td>1881</td>
<td>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 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.</td>
</tr>
</tbody>
</table>

17. Which protocol can safely be used to transmit sensitive information, such as credit card numbers? a. ftp c. https b. http d. tcp

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 |

Assessment Method:
Exam/Test/Quiz

**Standard and Target for Success:**
It is expected that 60% of the students correctly answer three or more questions.

Semester and Year Assessment Conducted:
2013-14 (Fall 2013)

Faculty Assessment Leader:
Gabriella Fernandez

Faculty Contributing to Assessment:

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**Assessment Method Description:**
The student in a semester long project will demonstrate the ability to create an e-commerce website using ASP.NET and C#. Given detailed specifications and example code, create a functioning e-commerce website that includes: a) a market-competitive user interface, b) a shopping cart, c) product recommendations, d) an order pipeline to follow the order process, e) a database which includes customers, products with product attributes, orders, audit, order, inventory, and product recommendation information, and search capability (Created By El Camino: Course SLOs (BUS) - Computer Information Systems)

**Related Documents:**
CIS 134 Project Ruberic.docx

02/01/2014 - Report of Data: 25 Students enrolled 12 without notation. 13 students completed the class: 10 with C or better (4-As, 4 Bs, 2 Cs) and 3 students failing: 1 of the failing students requested that he not be dropped due to VA requirements, 1 excellent student started new business and did not respond to reminders to drop. 2 excellent students dropped due to family emergencies. Retention and Success C or better was 77%.

Although retention rose, student success dropped from 82% the previous year. Two factors lead students to complete the course that influenced the students to stay in the class and learn as much as they could even though under other circumstances they may have

09/01/2016 - Prepare standard programming specifications and design logic diagrams for half of the requirements with students completing missing portions.

**Action Category:**
Teaching Strategies

09/01/2016 - Explore curriculum resources that are easily updated for changing technology and difficulty in finding appropriate textbooks.
### Course SLO Assessment Cycle:
2015-16 (Fall 2015)

### Input Date:
11/12/2013

### Course SLO Status:
Active

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### Assessment Method Description:
The student in a semester long project will demonstrate the ability to create an e-commerce website using ASP.NET, C#, HTML, and Microsoft SQL Server 2012

### Assessment Method:
Project

### Standard and Target for Success:
It is expected that 80% of students will score Partially Proficient 3 or above on this SLO.

### Related Documents:
CIS 134 Project Rubric.docx

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### Results:

- **Semester and Year Assessment Conducted:** 2013-14 (Fall 2013)
- **Faculty Assessment Leader:** Jacquelyn Thompson
- **Faculty Contributing to Assessment:** Jacquelyn Thompson
- **Reviewer's Comments:**
  Note: This assessment was conducted earlier than scheduled. Originally there was only one detailed semester-long project. By ECC requirement, it was expanded to 3 SLOs assessed by the same project. In addition, the only instructor for the course is retiring at the end of the spring semester. This will allow the new instructor the opportunity to carry out changes to improve the course.
- **Standard Met?**:
  Yes

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### Action Category:
Curriculum Changes

- 09/01/2016 - Explore tutorials or other methods to shorten learning curve for C# and ASP.NET

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### Action Category:
Teaching Strategies

- 09/01/2016 - Add required prerequisite to course
### Course SLOs

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<tbody>
<tr>
<td>El Camino: Course SLOs (BUS) - Computer Information Systems - ECC: CIS 134 - ASP.NET with C# Business Web Programming - SLO #3 Website Planning - Demonstrate project design and management of a complete e-commerce website including the use of requirements document, database and class diagrams, use case definitions, flowcharts, cross-functional flowcharts, site maps, user controls, classes and timelines</td>
<td><strong>Assessment Method Description:</strong> The student in a semester long project will demonstrate the ability to create an e-commerce website using ASP.NET, C#, HTML, and Microsoft SQL Server 2012. <strong>Assessment Method:</strong> Project. <strong>Standard and Target for Success:</strong> It is expected that 70% will score Partially Proficient 3 or above this SLO. <strong>Related Documents:</strong> <a href="#">CIS 134 Project Ruberic.docx</a></td>
<td>02/01/2014 - 25% of students are Proficient and 28% of students are Partially Proficient after 2 tries on 4 planning chapters. This SLO does not meet expectations. Assessment is accomplished on an individual student basis, allowing them to redo their planning specifications and diagrams numerous times. Additionally, in reality, coding never begins prior to completion of all planning is done and a contract is agreed to by the client. In the classroom, planning of each chapter happens along with the coding further tempting the student to code first and complete the planning second. As the semester progresses, those students who grasp the planning documents are able to progress more efficiently with each chapter of coding. However, those students who do not grasp the planning process and the importance of learning the process, fall further gradually further behind because they do no grasp the logic behind what code they are writing. Planning is accomplished prior to the implementation of any code. This course as structured follows the design and planning as published in the textbook. The process is therefore reliant on re-engineering by the student. Students have great difficulty in presenting documentation from the perspective of the designer meeting with the client rather than following already thought out logic of the author and without using programming terminology. At the beginning, gradually completed planning documentation is presented and then the student must continue the development. This increased proficiency in some planning areas, however, the Requirements Document still contains programming specifications rather than planning requirements. In addition, after an analysis of courses taken prior to taking CIS 134, only 50% of the student who took either CIS 18, 16, 133 exhibited proficiency in the planning cycle details early in the semester. This means that the students are not retaining the previous planning knowledge that each of these courses presents. <strong>Standard Met?</strong> : No <strong>Semester and Year Assessment Conducted:</strong> 2013-14 (Fall 2013) <strong>Faculty Assessment Leader:</strong> Jacquelyn Thompson <strong>Faculty Contributing to Assessment:</strong></td>
<td>09/01/2016 - Prepare standard programming specifications and design logic diagrams for half of the requirements with students completing missing portions. <strong>Action Category:</strong> Teaching Strategies 09/01/2016 - Require a student to write a requirements document of their own interest as the client would bring to the first meeting interview with a prospective developer that they may hire. <strong>Action Category:</strong> Teaching Strategies</td>
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**Course SLO Assessment Cycle:** 2017-18 (Fall 2017)

**Input Date:** 11/12/2013

**Course SLO Status:** Active
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<td></td>
<td></td>
<td>Jacquelyn Thompson</td>
</tr>
</tbody>
</table>

**Reviewer's Comments:**
Note: This assessment was conducted earlier than scheduled. Originally there was only one detailed semester-long project. By ECC requirement, it was expanded to 3 SLOs assessed by the same project. In addition, the only instructor for the course is retiring at the end of the 2014 Spring semester. This will allow the new instructor the opportunity to carry out changes to improve the course.