

Program: BS - CISDate: May 28, 2013Completed by: Juyun (Joey) Cho

**Assessment contributors (other faculty involved in this program's assessment):** Rick Huff, James Ma, Wayne Martinez, Tonia San Nicolas-Rocca, Erin Frew, Bruce Raymond

Please complete this form for each undergraduate, minor, certificate, and graduate program (e.g., B.A., B.S., M.S.) in your department. Please copy any addenda (e.g., rubrics) and paste them in this document, and return it to Erin Frew, [erin.frew@colostate-pueblo.edu](mailto:erin.frew@colostate-pueblo.edu) as an email attachment before June 1, 2013. You'll also find the form at the assessment website at <http://www.colostate-pueblo.edu/Assessment/Resources/Pages/default.aspx>. Thank you.

**I. Program student learning outcomes (SLOs) assessed in this cycle, processes, results, and recommendations.**

| A. Which of the program SLOs were assessed during this cycle? <b>Please include the outcome(s) verbatim from the assessment plan.</b> | B. When was this SLO last assessed? | C. What method was used for assessing the SLO? <b>Please include a copy of any rubrics used in the assessment process.</b> | D. Who was assessed? Please fully describe the student group. | E. What is the expected achievement level and how many students should be at it? | F. What were the results of the assessment? | G. What were the department's conclusions about student performance? | H. What changes/improvements to the <u>program</u> are planned based on this assessment? |
|---|-------------------------------------|--|---|--|---|--|--|
| N/A   | N/A                                 | N/A  | N/A   | N/A  | N/A   | N/A  | N/A  |
|   |                                     |  |   |  |   |  |  |

Comments:

Since spring 2012, CIS faculty have diligently worked on creating new CIS learning objectives, a curriculum map, and rubrics for newly created learning objectives. The CIS department used the same learning objectives and rubrics as other disciplines in HSB. But Dean Raymond thought it would be better for CIS to have different learning objectives and rubrics from other HSB disciplines because of the uniqueness of our program and as part of the preparation for joining the AACSB (Association to Advanced Collegiate Schools of Business). On the convocational week of spring 2012, CIS faculty discussed the learning objectives of each CIS core course. We listed learning objectives described on the syllabus of each course and came up with four common learning objectives for all the core courses, which were led to our new CIS program learning objectives (see an attached leaning objectives file). After we completed our program learning objectives, we created a curriculum map to pair up learning objectives with each course and discussed artifacts to assess the matched learning objective(s) (see an attached curriculum map file). Finally, we created rubrics for three learning objectives (see attached rubrics file) based on our peer institution's examples and the business rubrics distributed at the workshop led by Mary Allen in September 2012. We have not utilized the rubrics yet but we will have a pilot test at the beginning of fall, 2013 to see if there are any items need to be adjusted.

One thing we would like to mention is that we have conducted senior exit survey in spring 2013 (see senior exit survey file) and we will discuss the survey results in our first CIS faculty meeting in fall, 2013.

**B. Follow-up (closing the loop) on results and activities from previous assessment cycles. In this section, please describe actions taken during this cycle that were based on, or implemented to address, the results of assessment from previous cycles.**

| A. What SLO(s) did you address? Please include the outcome(s) verbatim from the assessment plan. | B. When was this SLO last assessed? | C. What were the recommendations for change from the previous assessment? | D. Were the recommendations for change acted upon? If not, why? | E. What were the results of the changes? If the changes were not effective, what are the next steps or the new recommendations? |
|--|-------------------------------------|---|---|---|
| N/A  | N/A                                 | N/A   | N/A   | N/A   |
|  |                                     |   |   |   |

Comments: Please see the comments above.

## **CIS Learning Objectives**

At the conclusion of the CIS program, students will demonstrate the ability to:

Objective 1. Analyze, design, implement, and maintain an information system.

Objective 2. Communicate clearly in writing and speaking.

Objective 3. Work effectively as a team member for a common purpose.

Objective 4. Identify ethical issues and provide alternatives or solutions.

|  | 1 - Analyze, Design                         | 2 - Written/Oral           | 3 - Team Skills               | 4 - Ethics          |
|--|---|----------------------------|-------------------------------|---------------------|
| CIS 100<br>Intro to Word &<br>Windows                |   |                            |                               |                     |
| CIS 103<br>PowerPoint &<br>Web Publishing            |   |                            |                               |                     |
| CIS 104<br>Excel<br>Spreadsheets                     |   |                            |                               |                     |
| CIS 105<br>MS Access DBMS                            |   |                            |                               |                     |
| CIS 150<br>Computer<br>Information<br>Systems        |   | x (I)<br>Research Paper    |                               | x (I)<br>Case Study |
| CIS 171<br>Intro to Java<br>Programming              | c,d (I)<br>homework                         |                            |                               |                     |
| CIS 185<br>PC Architecture                           | a,d (I)<br>in-class lab exercise            | x (I)<br>Oral Presentation | x                             |                     |
| CIS 240<br>Object-Oriented<br>Analysis and<br>Design | a,b (I)<br>Homework, Exam,<br>case problems | x (D)<br>Homework -written | x (I)<br>Team Case<br>Studies |                     |
| CIS 271<br>Adv. Program<br>Design with Java          | b,c,d (D)<br>Project                        |                            | x (D)<br>No artifact          |                     |
| CIS 289  | a,b (D)                                     | x (D)                      |                               | x (D)               |

a. analyze, b. design, c. implement, d. maintain

I: Introductory, D: Developing, M: Mastery

CIS 100, 103, 104, and 105 are core for all business students

it's not suitable to include them in CIS student-only assessments

| Network Concepts                              | Case Projects                                       | Paper,<br>Presentation                      |                              | Exam                          |
|---|---|---|------------------------------|-------------------------------|
| CIS 311<br>Introduction to<br>Web Development | a,b,c,d (D)<br>Individual Project,<br>Group Project |   | x (D)<br>Group Project       |                               |
| CIS 315<br>UNIX Operating<br>System           | c,d (D)<br>Homework, Exam,<br>quiz                  |   |                              | x (D)<br>No artifact          |
| CIS 350<br>Database Systems                   | a,b,c (D)<br>Quiz, Homework,<br>Exam, Project       | x (D)<br>Project Report,<br>Presentation    | x (D)<br>Peer Review         | x (D)<br>No artifact          |
| CIS 432<br>Senior<br>Professional<br>Project  | a,b,c,d (M)<br>Team Semester<br>Project             | x - written (M)<br>Team Project<br>Document | x (M)<br>Semester<br>Project | x (M)<br>future Case<br>Study |
| CIS 493<br>Senior Seminar                     |   | x (M)<br>Resume                             |                              | x (M)<br>future Case<br>Study |

**CIS Learning Objectives 1: Analyze, design, and implement and maintain an information system**

**April 16, 2013**

**Date:** \_\_\_\_\_

**Rater:** \_\_\_\_\_

**Course:** \_\_\_\_\_ **Student:** \_\_\_\_\_

| <b>Evaluation Criteria</b>            | <b>Exceeds Expectations</b>  | <b>Meets Expectations</b>  | <b>Needs Improvement</b>  | <b>Score</b> |
|---------------------------------------|--|--|---|--------------|
| <b>Analysis</b>                       | Shows strong ability to identify what an Information System should do  | Shows some ability to identify what an Information System should do  | Often fails to identify what an Information System should do  |              |
| <b>Design</b>                         | Shows strong ability to identify how components of an Information System should be implemented and integrated        | Shows some ability to identify how components of an Information System should be implemented                                 | Often fails to identify how components of an Information System should be implemented                       |              |
| <b>Implementation and Maintenance</b> | Shows strong ability to implement, test, debug, and deploy an error-free & completely functioning Information System | Shows some ability to implement, test, debug, and deploy implement an error-free & completely functioning Information System | Often fails to implement, test, debug, and deploy an error-free & completely functioning Information System |              |

**CIS Learning Objectives 3: Work effectively as a team member for a common purpose**

**April, 19 2013**

**Date:** \_\_\_\_\_

**Rater:** \_\_\_\_\_

**Course:** \_\_\_\_\_ **Student:** \_\_\_\_\_

| <b>Evaluation Criteria</b>   | <b>Exceeds Expectations</b>   | <b>Meets Expectations</b>  | <b>Needs Improvement</b>   | <b>Score</b> |
|--|---|--|--|--------------|
| <b>Attending team meetings</b>   | Rarely attends team meetings. Attendance record is haphazard and inconsistent; may be absent or late without notice | Attends most team meetings. If likely to be absent or late, informs others ahead of time | Attends all team meetings without being late   |              |
| <b>Participating meeting discussions</b>   | Observes passively and says little or nothing   | Participates in discussions, letting others provide the direction                        | Actively participates in discussion and asks questions   |              |
| <b>Participating non-meeting discussions, i.e. emails, online chatting, or phone calls</b> | Rarely responds to team project related discussions   | Participates in discussions, letting others provide the direction                        | Actively participates in or initiates discussions and project related communication                        |              |
| <b>Leadership</b>  | Lets others set and pursue the agenda   | Takes some part in setting group goals and agendas                                       | Takes a large part in setting group goals and agendas  |              |
| <b>Understanding of project concepts</b>   | Has limited understanding of the project concepts   | Occasionally introduces the information or asks questions                                | Listens actively and shows understanding by paraphrasing or by acknowledging and building on others' ideas |              |



|   |                            |   |   |  |
|---|----------------------------|---|---|--|
| <b>Contributing to the final deliverables. i.e. report, powerpoint, etc</b> | Does not fulfill own share | Carries own share of the group's responsibilities | Carries own share of the group's responsibilities, and organizes or helps organize final deliverables |  |
|---|----------------------------|---|---|--|

**CIS Learning Objectives 4: Identify ethical issues and provide alternatives or solutions**

**April 19, 2013**

**Date:** \_\_\_\_\_

**Rater:** \_\_\_\_\_

**Course:** \_\_\_\_\_ **Student:** \_\_\_\_\_

| <b>Evaluation Criteria</b>            | <b>Exceeds Expectations</b>                           | <b>Meets Expectations</b>              | <b>Needs Improvement</b>              | <b>Score</b> |
|---------------------------------------|---|--|---------------------------------------|--------------|
| <b>Identify ethical issues</b>        | Identifies critical and any additional ethical issues | Identifies the critical ethical issues | Identifies no critical ethical issues |              |
| <b>Identify alternative solutions</b> | Identifies multiple alternative solutions             | Identifies an alternative solution     | Identifies no alternative solutions   |              |
| <b>Supply appropriate solutions</b>   | Provides multiple appropriate solutions               | Provides an appropriate solution       | Provides no appropriate solutions     |              |

# **CIS Senior Exit Survey** **Computer Information Systems Program** **Spring 2013**

The Computer Information Systems (CIS) Department is interested in your perception of the utility of the education you have received from Colorado State University - Pueblo, specifically in the CIS program. The primary focus of this assessment is on the content and delivery of courses you completed in the CIS Department. Your responses to the following items will have a direct impact on the CIS program and CIS course offerings. The results of this survey will be summarized (your individual response will NOT be identified) and go directly to the CIS program coordinator and the CIS faculty for purposes of evaluation and possible improvements to the CIS curriculum and program.

## **CIS Program Learning Objectives**

Please respond to each of the following items by circling your answer.

| Item  | <div> <div>Strongly</div> <div>Somewhat</div> <div>Somewhat</div> </div> |       |         |          |          |
|---|--|-------|---------|----------|----------|
|   | Strongly   | Agree | Neutral | Disagree | Disagree |
| I feel my CIS degree has adequately taught/prepared me for the following areas: |  |       |         |          |          |
| Analyze, design, implement, and maintain an information system                  | 5  | 4     | 3       | 2        | 1        |
| Communicate clearly in writing and speaking                                     | 5  | 4     | 3       | 2        | 1        |
| Work effectively as a team member for a common purpose                          | 5  | 4     | 3       | 2        | 1        |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| Identify ethical issues and provide alternatives or solutions | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|

## Preparation for a Career in CIS

Please respond to each of the following items by circling your answer.

| Item  | Strongly<br>Agree | Somewhat<br>Agree | Neutral | Somewhat<br>Disagree | Strongly<br>Disagree |
|---|-------------------|-------------------|---------|----------------------|----------------------|
|   | 5                 | 4                 | 3       | 2                    | 1                    |
| I feel my CIS degree has adequately prepared me for a job in the CIS field.               | 5                 | 4                 | 3       | 2                    | 1                    |
| I feel confident in my ability to be successful in a CIS job.                             | 5                 | 4                 | 3       | 2                    | 1                    |
| I have learned everything I need to know to be a good employee in a CIS job.              | 5                 | 4                 | 3       | 2                    | 1                    |
| Overall, I feel I have the skills and abilities necessary for a successful career in CIS. | 5                 | 4                 | 3       | 2                    | 1                    |

## Course Quality and Utility

Please circle your response in each category of Quality and Utility. If you did not take the course described, cross out the course description and leave the response blank.

| Course Description                | Quality:<br>The level of quality in<br>course content and<br>instruction. |   |         |   | Utility:<br>The level of usefulness of<br>the course content and<br>instruction to your future<br>career. |   |         |   |
|-----------------------------------|---|---|---------|---|---|---|---------|---|
|                                   | High  |   | Average |   | High  |   | Average |   |
|                                   | Low   |   |         |   | Low   |   |         |   |
|                                   | Quality   |   | Quality |   | Utility   |   | Utility |   |
|                                   | Quality   |   | Quality |   | Utility   |   | Utility |   |
| Intro to Word & Windows           | 5   | 4 | 3       | 2 | 5   | 4 | 3       | 2 |
| PowerPoint & Web Publishing       | 1   |   |         |   | 1   |   |         |   |
| Excel Spreadsheets                | 5   | 4 | 3       | 2 | 5   | 4 | 3       | 2 |
| MS Access DBMS                    | 1   |   |         |   | 1   |   |         |   |
|                                   | 5   | 4 | 3       | 2 | 5   | 4 | 3       | 2 |
|                                   | 1   |   |         |   | 1   |   |         |   |
| Computer Information Systems      | 5   | 4 | 3       | 2 | 5   | 4 | 3       | 2 |
| Intro to Java Programming         | 1   |   |         |   | 1   |   |         |   |
| PC Architecture                   | 5   | 4 | 3       | 2 | 5   | 4 | 3       | 2 |
| Object-Oriented Analysis & Design | 1   |   |         |   | 1   |   |         |   |
| Adv. Program Design with Java     | 5   | 4 | 3       | 2 | 5   | 4 | 3       | 2 |
| Network Concepts                  | 1   |   |         |   | 1   |   |         |   |
| Intro. to Web Development         | 5   | 4 | 3       | 2 | 5   | 4 | 3       | 2 |
| UNIX Operating Systems            | 1   |   |         |   | 1   |   |         |   |
| Database Systems                  | 5   | 4 | 3       | 2 | 5   | 4 | 3       | 2 |
| Senior Professional Project       | 1   |   |         |   | 1   |   |         |   |
|                                   | 5   | 4 | 3       | 2 | 5   | 4 | 3       | 2 |

|                                  |   |   |   |   |   |   |   |   |  |
|----------------------------------|---|---|---|---|---|---|---|---|--|
| Senior Seminar                   | 1 |   |   |   | 1 |   |   |   |  |
| Advanced Programming w/ C#       | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
| IT Security                      | 1 |   |   |   | 1 |   |   |   |  |
| Network Systems Admin            | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
| Internet Server-Side Programming | 1 |   |   |   | 1 |   |   |   |  |
| IT Security Management           | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
| Computer Forensics               | 1 |   |   |   | 1 |   |   |   |  |
| Cooperative Education/Internship | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
| <b>Other Courses:</b>            | 1 |   |   |   | 1 |   |   |   |  |
| Principles of Management         | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
| Project Management               | 1 |   |   |   | 1 |   |   |   |  |
| Business Communications          | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
| Other                            | 1 |   |   |   | 1 |   |   |   |  |
| (describe):_____                 | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
| Other                            | 1 |   |   |   | 1 |   |   |   |  |
| (describe):_____                 | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
| Other                            | 1 |   |   |   | 1 |   |   |   |  |
| (describe):_____                 | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
| Other                            | 1 |   |   |   | 1 |   |   |   |  |
| (describe):_____                 | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
| Other                            | 1 |   |   |   | 1 |   |   |   |  |
| (describe):_____                 | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
|                                  | 1 |   |   |   | 1 |   |   |   |  |
|                                  | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
|                                  | 1 |   |   |   | 1 |   |   |   |  |
|                                  | 5 | 4 | 3 | 2 | 5 | 4 | 3 | 2 |  |
|                                  | 1 |   |   |   | 1 |   |   |   |  |

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

**Please respond to each of the following questions:**

What were the most valuable things you received from your CIS education at CSU-Pueblo?

If you could change ONE thing about the CIS program/department/faculty to improve the quality of student learning or learning outcomes it delivers, what would it be?

Discuss any other improvements that you feel should be made to the CIS curriculum/program/faculty to improve the quality of the student learning experience:

Please list any topics/courses you feel should be included in the CIS program that are not currently taught, or any approaches to teaching you feel should be included:

**THANKS for your feedback!**

**Your perspective on the CIS program will have a direct and immediate impact on the quality of the program.**