Colorado State University – Pueblo Academic Program Assessment Report for AY 2014-2015   **Due: June 1, 2015**

Program: Bachelor of Science – Computer Information Systems   **Date:** __May 29, 2015__

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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 submit it to the dean of your college/school as per the deadline established. The dean will forward it to me as an email attachment before June 2, 2014. You'll also find the form at the assessment website at http://www.colostate-pueblo.edu/Assessment/ResultsAndReports/Pages/default.aspx.

Please describe the 2014-2015 assessment activities for the program in Part I. Use Column H to describe improvements planned for 2015-2016 based on the assessment process. In Part II, please describe activities engaged in during 2014-2015 designed to close-the-loop (improve the program) based on assessment activities and the information gathered in 2013-2014. 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? **Please include the outcome(s) verbatim from the assessment plan.**	B. When was this SLO last assessed? Please indicate the semester and year.	C. What method was used for assessing the SLO? **Please include a copy of any rubrics used in the assessment process.**	D. Who was assessed? Please fully describe the student group(s) and the number of students or artifacts involved.	E. What is the expected achievement level and how many or what proportion of 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 program are planned based on this assessment?
CIS learning objective 1 - Analyze, design,	Spring, 2014	Final project reports, slides, and applications	10 individual students in the 3 teams	Our expected achievement level is that	. For analysis goal, 100% of students evaluated	Student's performance are at acceptable level in the all of the three	We will continue to emphasize the life cycle of software development and continue to monitor

implement, and maintain an information system		collected from CIS 432, Senior professional project		at least 70% of students are at either the "meets expectations" or "exceeds expectations" levels.	met expectations. . For design goal, 100% of students evaluated met either "exceeds expectations" or "meets expectations". . For implementation and maintenance goal, 100% of students evaluated met "meets expectations".	areas – analysis, design, and implementation and maintenance. However, student's performance in theses areas still has a room to be improved.	SLO in this area.
CIS learning objective 2 - Communicate clearly in writing and speaking (only the writing part was evaluated)	Spring, 2014	Final project report and slides collected from CIS 432, Senior professional project	12 individual students in the 3 teams	Our expected achievement level is that at least 70% of students are at either the "meets expectations" or "exceeds	. For subject matter knowledge goal, 100% of students exceeded expectations. . For literacy goal (grammar,	Students are performing at acceptable levels in the three areas – subject matter knowledge, literacy, and logic flow. However, we consider the results that showed 100% of students did not	We will discuss how to train our students to use proper citations and references.

| | | | | | expectations" levels. | spelling, and punctuation), 100% of students met either "exceeds expectations" or "meets expectations". For logic flow goal, 100% of studetns met either "exceeds expectations" or "meets expectations. For proper references goal, 100% of studetns were identified as "needs improvements" because none of students clearly specified the source of references in | mention clearly the source of proper references should be discussed and improved. | |

					their reports.		
CIS learning objective 3 - Work effectively as a team member for a common purpose	Spring, 2014	Peer review reports collected from CIS 432, Senior professional project	34 individual students	Our expected achievement level is that at least 70% of students are at either the "meets expectations" or "exceeds expectations" levels.	More than 82% of studetns met either "exceeds expecations" or "meets expectations" in the area of attending team meetings, participating in team discussions, participating in non-meeting discussions (email, online chatting, phone calls), understanding the project concepts, and contributing to the final deliverables. But, only	Majority of students are performing very well in all of the areas except for the leadership area.	Though more than 70% of our students met the acceptable performance level in the five areas, we will continue to look for some ways to improve in this learning goal. The leadership area is lower than our 70% goal in two years in a row and needs to be discussed the way to improve this area.

				65% of students met our expecatations in the leadership area.		

Comments:

The CIS 432 (Senior professional project) class is a capstone course in our program. Students work as a team on a real-life project requested by our local community. Students have completed the nine projects this year including 1) Colorado Governor's OIT – ProTech Performance, 2) CSUP Admissions and Records - Skytronics, 3) CSUP Mass Communications – KEA Technology, 4) CSUP Propel STEM – Innovative Technologies, 5) CSUP Trio – Sangre De Cristo Software, 6) Pueblo City–County Library – Singularity Solutions, 7) Puelo Soup Kitchen – Hypertension Solutions, 8) Sangre de Cristo Hospice – Inconceivable Concepts, and 9) YMCA – Colorado Solutions.

We have conducted senior exit survey in spring 2015 (see senior exit survey and result files) and we will discuss the survey results in our CIS faculty meeting in fall, 2015 to look for some ways to improve the quality our program.

II. 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? Please indicate the semester and year.	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?

Learning objective 1: Analysis, design, and implementation and maintenance	Spring, 2014	We decided to emphasize more on the design techniques such as ER diagram and functional/usability/reliability /performance requirements and continure to monitor SLOs in this area.	Out of the four phases of a software development life cycle, design phase was emphasized in the object-oriented systems analysis and design course. Students had an opportunity to practice design concepts in the advanced Java programming language course through the design of the class project using a Microsoft Visio for the graphical user interface.	As shown in section I of this report, 100% of students evaluated met either "exceeds expecations" or "meets expectations". This certainly shows the improvement in the design area if we consider the fact that the only 68% of students had met the expectation last year.
Learning objective 2: Communication	Spring, 2014	We decided to discuss how we can improve SLO in the literacy (grammar, spelling, and punctuation) area.	Through various class projects in the upper level courses, students had opportunities to reinforce the grammar, spelling and punctuation as they wrote final project reports and created power point slides.	Only 66% of student had met the literacy goal last year but 100% of students met either "exceeds expectations" or "meets expectations" this year. This is a good improvement in this area. However, we need to educate our student how to use citations and proper references.
Learning objective 3: Team skills	Spring, 2014	We decided to discuss how we can improve the leadership area.	Students had an opportunities to be trained to take a large part in setting group goals and agendas in various upper level class projects.	Only 57% of students evaluated either met expectations or exceeded expectations last year but 65% of students either met expectations or exceeded expectation this year. This result shows some improvement but still does not meet our 70% goal. We need to educate our students more in this field.

Comments:

Due to the small number of sample size except for the learning objective 3 (Team skills), it is a bit difficult to determine whether our assessment results in the learning objective 1 and 2 are good enough to represent the whole CIS majors. Given this, we will discuss the effective way to evaluate more samples in the next CIS faculty meeting.

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.

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

April 16, 2013

Date: _____

Rater: _____   **Course:** _____ **Student:** _____

Evaluation Criteria	Exceeds Expectations	Meets Expectations	Needs Improvement	Score
Analysis	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	
Design	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	
Implementation and Maintenance	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 2: Communicate clearly in writing and speaking.

November 15, 2013

Date: _____

Rater: _____   Course: _____   Student: _____

Oral Communication Rubric

Evaluation Criteria	Exceeds Expectations	Meets Expectations	Needs Improvement	Score
Kinetics (Body Language)	Presenter's body language and voice tone demonstrates high confidence and comfort with the subject matter. Presenter demonstrates high confidence, empathy and comfortable interaction with the audience. Presenter gestures are confident, relaxed and natural and match the content and purpose of the presentation. Presenter makes an excellent delivery with a voice that projects enthusiasm, interest and confidence.	Body language and voice tone reflect the presenter's relative comfort and command of the subject matter in interacting with the audience. Presenter uses appropriate gestures and body language that are somewhat confident. Presenter makes a good delivery with some level of confidence in body language and voice modulation.	Body language and voice tone reveal presenter's discomfort and lack of confidence with the subject matter. Presenter reveals a reluctance to interact with the audience. Presenter's body movement is terse and stiff. Presenter may appear fearful or highly nervous of his/her audience. Presenter's body language lacks confidence, and voice projection is often hard to understand.	

Organization	Presenter follows a very clear and logical sequence in their presentation that the audience can follow. Presenter focuses on the defined and critical points of the presentation and provides clear explanations for each point. Presenter provides clear and concise "takeways" and conclusions for the audience.	Presenter follows a logical sequence in their presentation but does not provide any additional information. Presenter uses a "checklist" approach to the presentation material. Presentation structure is adequate and mechanical but lacks strong definition and emphasis.	Presenter offers no logical sequence of information. Presenter does not provide clear explanations and elaborations of the subject matter. Presenter fails to focus on the critical points of the presentation. Presenter does not provide clear and concise conclusions for the audience.	
Subject Matter Knowledge	Presenter clearly demonstrates excellent and in-depth knowledge and confidence with the subject matter. Presenter demonstrates a clear understanding of the details and interconnection links of the elements of the subject matter. Presenter clearly and thoroughly addresses questions from the audience regarding the subject matter.	Presenter reflects a relative comfort with the subject matter. Presenter demonstrates a good understanding of the details and interaction of the elements of the subject matter. Presenter addresses and replies to most questions regarding the subject matter.	Presenter is unclear and not well informed with the subject matter. The presenter appears to be unsure and disorganized in their presentation of the subject material. Presenter may just be repeating facts without understanding details or interaction with other elements of the subject matter. Presenter cannot address basic questions regarding	

	Presenter makes a professional and thorough analysis and presentation to the audience.		the subject matter.	
Articulation (Delivery)	Presenter speaks clearly and loudly enough and for all in audience to hear, at a comfortable rate, makes no grammatical errors, and pronounces all terms correctly and precisely. Presenter is enthusiastic and engaging. Presenter is extemporaneous and natural.	Presenter speaks clearly and loudly enough to be heard by most in audience, at an appropriate rate, (some/rare awkward pauses or halting delivery), makes few grammatical errors, and pronounces most terms correctly with fluid delivery overall.	Presenter mumbles, speaks too quietly to be heard by many in audience, mispronounces words, and makes serious and persistent grammatical errors throughout the presentation. Presenter loses train of thought and is tentative.	
Content Clarity and Completeness	Presenter handles all elements professionally. Presenter develops and supports ideas using well- chosen examples and creative details.	Presenter handles material competently and includes essential information which is factually correct.	Presenter misses two or more essential elements. Presentation contains major factual errors and mis-representations.	

Written Communication Rubric

Evaluation Criteria	Exceeds Expectations	Meets Expectations	Needs Improvement	Score
Subject Matter Knowledge	Clearly demonstrates excellent and in-depth knowledge of the subject matter. Demonstrates an excellent understanding of the details and interconnection links of the elements of the subject matter.	Demonstrates fair knowledge of the subject matter. Demonstrates a fair understanding of the details and interconnection links of the elements of the subject matter.	Demonstrates poor/inadequate knowledge of the subject matter. Demonstrates a poor understanding of the details and fails to show interconnection links of the elements of the subject matter.	
Literacy (grammar, spelling, punctuation)	No grammar, spelling, punctuation errors and excellent word usage. Writing at expected grade level or above.	Has some grammatical errors, spelling and punctuation errors. Writing at one or two levels below current grade level.	Has many grammatical errors, spelling and punctuation errors. Writing at more than two levels below current grade level.	
Logical Flow	Demonstrates ability to produce professional quality documents (fully footnoted and referenced, with proper cover pages, headings, footings, and table of contents)	Produces documents with minimal professional elements (footnotes, references, cover pages, headings, footings, table of contents)	Produced documents are lacking significant professional elements (footnotes, references, cover pages, headings, footings, table of contents)	
Proper References	Expertly integrates relevant articles, uses correct citations, and references based on certain academic writing styles.	Fairly integrates relevant articles, has some correct citations and references.	Fails to integrate relevant articles, citations, or references.	

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

April, 19 2013

Date: _____

Rater: _____   Course: _____   Student: _____

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

Contributing to the final deliverables. i.e. report, PowerPoint, etc.	Carries own share of the group's responsibilities, and organizes or helps organize final deliverables	Carries own share of the group's responsibilities	Does not fulfill own share	

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

April 19, 2013

Date: _____

Rater: _____   **Course:** _____   **Student:** _____

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

CIS Senior Exit Survey
Computer Information Systems Program
Spring 2015

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	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly 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 Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
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: The level of quality in course content and instruction.					Utility: The level of usefulness of the course content and instruction to your future career.				
	High Quality		Average Quality		Low Quality	High Utility		Average Utility		Low Utility
Intro to Word & Windows	5	4	3	2	1	5	4	3	2	1
PowerPoint & Web Publishing	5	4	3	2	1	5	4	3	2	1
Excel Spreadsheets	5	4	3	2	1	5	4	3	2	1
MS Access DBMS	5	4	3	2	1	5	4	3	2	1
Computer Information Systems	5	4	3	2	1	5	4	3	2	1
Intro to Java Programming	5	4	3	2	1	5	4	3	2	1
PC Architecture	5	4	3	2	1	5	4	3	2	1
Object-Oriented Analysis & Design	5	4	3	2	1	5	4	3	2	1
Adv. Program Design with Java	5	4	3	2	1	5	4	3	2	1
Network Concepts	5	4	3	2	1	5	4	3	2	1
Intro. to Web Development	5	4	3	2	1	5	4	3	2	1
UNIX Operating Systems	5	4	3	2	1	5	4	3	2	1
Database Systems	5	4	3	2	1	5	4	3	2	1
Senior Professional Project	5	4	3	2	1	5	4	3	2	1
Senior Seminar	5	4	3	2	1	5	4	3	2	1
Advanced Programming w/ C#	5	4	3	2	1	5	4	3	2	1
IT Security	5	4	3	2	1	5	4	3	2	1
Network Systems Admin	5	4	3	2	1	5	4	3	2	1
Internet Server-Side Programming	5	4	3	2	1	5	4	3	2	1
IT Security Management	5	4	3	2	1	5	4	3	2	1
Computer Forensics	5	4	3	2	1	5	4	3	2	1
Cooperative Education/Internship	5	4	3	2	1	5	4	3	2	1
Other Courses:										
Principles of Management	5	4	3	2	1	5	4	3	2	1
Project Management	5	4	3	2	1	5	4	3	2	1

Business Communications	5	4	3	2	1	5	4	3	2	1
Other (describe):_____	5	4	3	2	1	5	4	3	2	1
Other (describe):_____	5	4	3	2	1	5	4	3	2	1
Other (describe):_____	5	4	3	2	1	5	4	3	2	1
Other (describe):_____	5	4	3	2	1	5	4	3	2	1
Other (describe):_____	5	4	3	2	1	5	4	3	2	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.