

**Colorado State University – Pueblo Academic Program Assessment Report for AY 2013-2014**

**Due: June 2, 2014**

**Program:** \_\_\_\_\_ Construction Management \_\_\_\_\_

**Date:** \_\_\_\_ May 29, 2014

**Completed by:** \_\_\_\_\_ Michael Mincic \_\_\_\_\_

**Assessment contributors (other faculty involved in this program's assessment):** \_\_\_\_\_ Daniel Trujillo \_\_\_\_\_

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 2013-2014 assessment activities for the program in Part I. Use Column H to describe improvements planned for 2014-2015 based on the assessment process. In Part II, please describe activities engaged in during 2013-2014 designed to close-the-loop (improve the program) based on assessment activities and the information gathered in 2012-2013. 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? <b>Please indicate the semester and year.</b>	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(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 <u>program</u> are planned based on this assessment?
#1- Apply knowledge, techniques, skills	Academic year 13/14 is	Three category rubric assessing: -Knowledge	A random sample of the	70% of the students will achieve level	100% of students achieve level	Student's showed a high degree of competency with	The instructor plans to integrate a comprehensive

and tools of the construction industry in construction activities	the first time to evaluate this SLO	-Performance -Communication With additional course grading standards	students enrolled in CM 351	2 or level 3.	2 or level 3	3 students demonstrating superior knowledge, performance and communication	evaluation of a project schedule to include oral and written presentation of the project.
#5-Communicate effectively regarding subjects related to construction activities.	Academic year 13/14 is the first time to evaluate this SLO	Three category rubric assessing: -Knowledge -Performance -Communication With special emphasis in communication and additional course evaluations such as a peer review rubric and an instructor rubric of final project presentation.	All senior projects and evaluations	70% of the students will achieve level 2 or level 3	The results are based upon evaluation of 9 students. One student was hospitalized prior to the final presentation. -100% of the students were at level 2 or level 3. -81% of the students performed at level 3 in written communication. -90% of the students performed at level 2 while 10% performed at level 3 in oral	The department felt the students while having had an oral communication class in the freshman year the students are not given enough time to enhance the skill. The students should be better prepared in oral communication prior to the CM 475 course.	Implement training in oral communication throughout the curricula. Inform the student of the necessity to strengthen oral communication skills. Introduce the students to a rubric of oral communication expectations early in their program and constantly reinforce.

					communicatio n.		
--	--	--	--	--	--------------------	--	--

Comments:

**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?

Comments:

### Rubric: Construction Management Outcomes #1

**Outcome:** #1- Apply knowledge, techniques, skills and tools of the construction industry in construction activities.

**Evidence:** Review and Analysis of assigned projects during the CM 351-Construction Planning and Scheduling course.

**Standard:** We will be satisfied if 70% or more of the students achieve Level 2 or 3

Category			
	Level 3 (Superior)	Level 2 (Basic)	Level 1 (Unacceptable)
Knowledge:	Demonstrates an ability to apply superior knowledge of the techniques, skills and tools of the construction industry. Through the preparation of a comprehensive project addressing the planning and scheduling of construction activities. Also the ability to compare and contrast the results of the data to enhance quality of the results in the future Demonstrates ability to prepare a comprehensive report of the given project.	Demonstrates an ability to apply basic of the techniques, skills and tools of the construction industry. Through the preparation of a comprehensive report of the process and results of planning and scheduling of construction activities.. Also the ability to compare and contrast the results of the data to enhance quality of the results in the future Demonstrates ability to prepare a report of the given project.	Unable to demonstrate an ability to apply basic knowledge of the techniques, skills and tools of the construction industry. Through the preparation of a comprehensive report of planning and scheduling of construction activities. Also the ability to compare and contrast the results of the data to enhance quality of the results in the future Unable to demonstrates ability to prepare an acceptable report of the given project.
Performance	Performing superior techniques, skills and tools of the construction industry s by accomplishing the comprehensive project addressing the planning and scheduling of construction activities with minimal supervision and independent results demonstrated in a project and consultation of supervising authority. -Demonstrates a superior ability to compare and contrast the results of the data. -Demonstrates a superior ability to improve the results after analysis of data.	Performing basic techniques, skills and tools of the construction industry by accomplishing the comprehensive project addressing the planning and scheduling of construction activities with minimal supervision and independent results demonstrated in a project report and consultation of supervising authority. -Demonstrates a basic ability to compare and contrast the results of the data. -Demonstrates a basic ability to improve the results after analysis of data.	Unable to perform of the techniques, skills and tools of the construction industry by accomplishing the comprehensive project addressing the planning and scheduling of construction activities with minimal supervision and independent results demonstrated in a project report and consultation of supervising authority. -Unable to demonstrate a basic ability to compare and contrast the results of the data. -Unable to demonstrates a basic ability to improve the results after analysis of data.
Communication	-Demonstrates ability to prepare a superior comprehensive report of the specific construction estimating and management project quality of a competent leader. Using properly prepared standard formats as specified with no grammatical or spelling errors.	Demonstrates ability to prepare a basic report of the specific planning and scheduling of construction activities quality of a competent leader. Using properly prepared standard formats as specified with minimal grammatical or spelling errors.	Unable to prepare a basic report of the specific planning and scheduling of construction activities quality of a competent leader. Using properly prepared standard formats as specified with no grammatical or spelling errors.

1. **Comments:** During this assessment cycle the instructor evaluated SLO#1 (Apply knowledge, techniques, skills and tools of the construction industry in construction activities.), using the attached rubric. The rubric evaluates students knowledge, performance and communication as superior basic or unacceptable.

The instructor used the final grade, a project schedule and understanding of Earned Value Management to assess the students' skills. Of the 13 students in the course, it was determined that two students demonstrated superior knowledge performance and communication. One student performed at a Superior level for Knowledge, basic level for performance and Superior communication. The other 10 students performed within the parameters of basic knowledge performance and communication. Of those ten, one student was marginal on the communication due to spelling and grammar errors, but was deemed able to perform at a basic level of competence. Overall the instructor determined that 100% of the students were able to communicate at level 3 superior or 2 basic.

### Rubric: Construction Management Outcomes #5

**Outcome:** #5- Communicate effectively regarding subjects related to construction activities.

**Evidence:** Review and Analysis of the final project during the CM 475-Senior Project course.

**Standard:** We will be satisfied if 70% or more of the students achieve Level 2 or 3

Category			
	Level 3 (Superior)	Level 2 (Basic)	Level 1 (Unacceptable)
<b>Knowledge:</b>	Demonstrates an ability to apply superior knowledge of the techniques, skills and tools of the construction industry communication. Through the preparation of a comprehensive project addressing a construction activity. Also the ability to compare and contrast the results of the data to enhance quality of the results in the future Demonstrates ability to prepare a comprehensive report of the given project.	Demonstrates an ability to apply basic of the techniques, skills and tools of the construction industry communication. Through the preparation of a comprehensive report of the process and results of a semester long senior project. Also the ability to compare and contrast the results of the data to enhance quality of the results in the future Demonstrates ability to prepare a report of the given project.	Unable to demonstrate an ability to apply basic knowledge of the techniques, skills and tools of the construction industry communication. Through the preparation of a comprehensive report of the process and results of a semester long senior project. Also the ability to compare and contrast the results of the data to enhance quality of the results in the future Unable to demonstrate ability to prepare an acceptable report of the given project.
<b>Performance</b>	Performing superior techniques, skills and tools of the construction industry s by accomplishing the comprehensive project communication of the construction activities with minimal supervision and independent results demonstrated in a final project and consultation of supervising authority. -Demonstrates a superior ability to compare and contrast the results of the data. -Demonstrates a superior ability to improve the results after analysis of data.	Performing basic techniques, skills and tools of the construction industry by accomplishing the comprehensive project addressing the planning and scheduling of construction activities with minimal supervision and independent results demonstrated in a final project report and consultation of supervising authority. -Demonstrates a basic ability to compare and contrast the results of the data. -Demonstrates a basic ability to improve the results after analysis of data.	Unable to perform of the techniques, skills and tools of the construction industry by accomplishing the comprehensive project addressing the planning and scheduling of construction activities with minimal supervision and independent results demonstrated in a final project report and consultation of supervising authority. -Unable to demonstrate a basic ability to compare and contrast the results of the data. -Unable to demonstrates a basic ability to improve the results after analysis of data.
<b>Communication</b>	-Demonstrates ability to prepare a superior comprehensive report and presentation of the specific construction project quality of a competent leader. Using properly prepared standard formats as specified with no grammatical or spelling errors. Able to present	-Demonstrates ability to prepare a basic comprehensive report and presentation of the specific construction project quality of a competent leader. Using properly prepared standard formats as specified with minimal grammatical or spelling errors. Able to basically present as a team or	-Unable to demonstrates ability to prepare a basic comprehensive report and presentation of the specific construction project quality of a competent leader. Using properly prepared standard formats as specified with no grammatical or spelling errors. . Unable to

	as a team or individually the construction activity orally in front of multiple audiences using multiple presentation tools.	individually the construction activity orally in front of multiple audiences using multiple presentation tools.	basically present as a team or individually the construction activity orally in front of multiple audiences using multiple presentation tools.
--	--	---	--

### Comments:

During this review cycle SLO #5 (Communicate effectively regarding subjects related to construction activities) was the concentration area. Since communication is the main emphasis for evaluation the evaluator chose to evaluate on the categories of the assessment rubric. The categories are: Knowledge, Performance and Communication. The assessment results use the senior project presentation both written and oral. Each student was separated into a team and each team was presented with the senior project. Each team worked throughout the semester to analyze, evaluate, research, design and prepare a comprehensive solution to the assigned project. Each team was to turn in a written completed project for evaluation as well as present the orally the final project.

The knowledge, performance and communication of the written and oral presentation has been evaluated by the instructor(s) as well peer-reviewed by each team member. The reported information is an evaluation of that data.

### Written Communication:

Instructor Evaluation – 100% of the students within the course completed the written portion of the within level 3 (Superior) and level 2 (Basic).

Peer Evaluation- 81% of the students completed the written portion of the project at level 3 (Superior).

### Oral Communication:

Instructor(s) Evaluation- Instructor one's evaluation found that 90% of the students performed at level 2 with 0% performing at level 3. 1 student was unable to present for medical reasons.

Instructor two's evaluation found that 90% of the students performed at level 3 or 2.

#### Evaluator's Opinion:

One evaluator felt that no student performed at the superior level in the oral communication part of the assessment the other instructor noted a need to “help our students perform at a higher level in their oral presentations”.

A standard rubric was used to help evaluate this oral communication as is attached at the end of this document which is desgined to supplement the rubric for evaluation of student learning outcome #5 (Communicate effectively regarding subjects related to construction activities).