Colorado State University – Pueblo Academic Program Assessment Report for AY 2012-2013 **Due: June 1, 2013**

Program:_____Biology _____ **Date:** __May 31, 2013_____

Completed by:___Helen Caprioglio_____

Assessment contributors (other faculty involved in this program's assessment): ____all Biology Faculty_____

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 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? **Please include the outcome(s) verbatim from the assessment plan.**	B. When was this SLO last assessed ?	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.	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 program are planned based on this assessment?
1) Students will develop a broad-based knowledge of concepts and terminology in molecular, cellular, organismal and	AY 2011-2012	ETS Biology MFT exam	All senior Biology majors enrolled in BIOL 493 Seminar for AY 2012-13.	Institutional mean score will be ≤50th percentile nationally. (Overall and most subscores.)	Biology mean overall score for 2012-13 ranked nationally at 74th percentile.	Results mostly met or exceeded our expectations. Our students are learning biology knowledge and concepts well compared to their	PROPEL 2013 summer institute is re-evaluating our BIOL 181/182 core sequence for content and pedagogy adjustments. We are also considering a restructure of all core and

ecological biology				60% of Biology students will score above 50th percentile.	13 Subscore means ranged from 41st-86th percentile, with one <50th. Individually 61% of CSUP students scored above 50th percentile.	peers. The lowest scoring was in an area (plants) less emphasized in our core curriculum, so not surprising.	elective Biology course requirements for CAPB submission in fall 2013.

Comments:

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?
3) Students will complete written and oral reports in core and elective courses that require literature interpretation. The quality of research proposals completed in Seminar course will be used as evidence of this outcome.	AY 2010-11	Departmental discussions will be held to revise the tools for assessment to better measure the desired outcomes and give us more useful data regarding potential areas for improvement.	Yes, based on our review documents were edited to better align with the SLOs being assessed and a scoring scale was applied. These documents were implemented beginning Fall semester 2012.	Revised forms better align with our intended SLOs. We will use these for at least two years of courses before we assess their effectiveness in gathering information. Plan is to assess in May 2014.
4) Students will	NA	Develop common	Yes, A common format for	We continue to assess whether the

demonstrate critical thinking and problem solving skills using experimental design and the scientific method.		departmental format for lab reports and feedback to students regarding outcomes and progress.	lab reports and a similar grading rubric was adopted for BIOL 181L and BIOL 182L labs	rubric format chosen is working well. Changes are made as necessary.
5) Student assignments in many core and elective courses will address scientific validity. This will culminate in the peer review process for the research proposal in Seminar.	AY 2010-11	Departmental discussions will be held to revise the tools for assessment to better measure the desired outcomes and give us more useful data regarding potential areas for improvement.	Revised Documents were utilized in Seminar to better measure the SLOs being assessed and a scoring scale was applied.	We will use these revised forms for at least two years of courses before we assess their effectiveness in gathering information. Plan is to assess in May 2014.

Comments:

BIOL 181 Lab 4 Grading Rubric

Name:		Score				
		1	3/4	1/2	1/4	0
Introduction						
1	Statements of question & hypothesis clear and correct					
2	Provides logical argument for why question & hypothesis(es) are being investigated					
3	Provides relevance (background) for why question & hypothesis(es) are being investigated					
Methods						
4	Experimental design is described completely and clearly					
5	Procedure is justified					
6	Experimental and control variables and assumptions are correctly chosen and justified					
7	Methods provide for appropriate test of selected hypothesis(es)					
Results						
8	Data are summarized and displayed appropriately in graphs and tables					
9	Trends in data are made clear in text without repeating information in tables or graphs					
10	Tables and Figures are labeled, numbered, and cited in text appropriately					
11	Tables and figures can be interpreted without reference to the text					
Discussion						
12	Questions and hypotheses stated in introduction are addressed					
13	Conclusions are supported by data					
14	Alternative explanations are discussed					
15	Additional hypotheses are generated					
16	Unexpected results are interpreted without unnecessary reference to experimental error					
17	Appropriate comparisons to references are made and properly cited					
18	Interpretations and information presented are correct given sources available to student					
General						
19	Writing is clear and free of spelling, punctuation, and grammatical errors					
20	All four sections of paper are present (Intro, Methods, Results, and Discussion) and content is appropriate					
Extended Insurance Points (+ 1 pt each)						
1	Appropriate comparisons to literature are made and cited					
2	Methods are illustrated by images or graphics and referenced					
3	Additional experiments designed					
4	Additional experiments completed					

BIOL 493 Comparison of Primary & Secondary Literature Grading Rubric

(50 points total)

Name:		Score					
Grading Rubric		5	4	3	2	1	0
Mechanics							
1	2-3 pages maximum						
2	Doubled spaced, 1" margins, 12 pt. font						
Critical Discussion of Primary and Secondary Literature Sources							
3	Primary Source Article Discussion: Research Justification, Methods, Analysis and Interpretation of Findings.						
4	Primary Source Article Discussion: Contribution to the field, Conclusions of Paper.						
5	Secondary Source (Review Article) Discussion: Content of Article.						
6	Secondary Source (Review Article) Discussion: Form of Article.						
Responses to Specific Questions							
7	What did you like or dislike about each article?						
8	What would you have done differently in each article?						
9	Was each article worthy of publication?						
10	What were some similarities and differences between the two articles?						

Name of individual writing this evaluation: _

BIOL 493 – BIOLOGY SENIOR SEMINAR
Instructor: Dr. M. M. Diawara
Colorado State University – Pueblo

SEMINAR EVALUATION SHEET

Name of Speaker: ....

Date of presentation: ....
Title of Seminar: ....
....

	Evaluation		
	Excellent	Good	Poor
Subject knowledge			
Quality of visual aids			
Organization (Introd., Body, Summary)			
Eye contact			
Enthusiasm			
Fielding of questions (Repeat, Answer, etc.)			
Spontaneity			
Clarity of Speech			
Use of time			
Appropriate Attire			

Your numerical evaluation of the presentation: __________ / 100

Your constructive remarks: