Plan for Assessment for CTE Degrees and Certificate Outcomes

AAS or Certificate \_\_\_\_\_\_\_Bioscience AAS \_\_\_\_\_\_\_\_\_\_\_\_

**To complete this Assessment Plan for 2010-2012,** please address the questions below, either in this space, or using the “CTE Worksheet,” or organizing the information in a manner that suits your SAC

**Send to:** [*learningassessment@pcc.edu*](mailto:learningassessment@pcc.edu) **by November 15, 2010;** subject line: PLAN Assessment [SAC]

1. List the learning outcomes for your AAS Degree (or if there is none, the dominant certificate)

* Apply knowledge of safety principles, quality and regulatory issues, teamwork and good business practices to work in a bioscience laboratory or manufacturing environment. Community and Environmental Responsibility
* Carry out routine laboratory tasks and commonly used techniques with confidence, quality and appropriate documentation in a bioscience laboratory or manufacturing environment. Communication
* Apply knowledge of measurement and assay principles and strategies, purification principles, and the scientific method to laboratory situations.
* Apply principles learned in courses to troubleshoot laboratory and manufacturing problems and devise and execute appropriate solutions. Critical Thinking
* Plan and organize tasks to allow efficient completion of complex procedures, including planning and executing multiple procedures that proceed simultaneously. Coordinate with others to work as part of a team. Critical Thinking
* Effectively, clearly and succinctly communicate the procedures, results and interpretations of laboratory activities to other staff in the bioscience workplace, using both informal and formal forms of scientific communication, including casual conference, the laboratory notebook, forms, memoranda, written reports and formal presentations. Communication

1. Identify those that map to College Core Outcomes.

All of the AAS outcomes address Professional Competence. Other Core Outcomes address are indicated below. At present, the outcomes do not reflect the way Bioscience addresses Self-reflections. Also, at present, the program does not specifically address Cultural Awareness.

1. Indicate generally how each degree outcomes will be assessed. Please include information about the setting (in courses, via portfolio, standardized exam, etc.); the students (all students or a sample) and the approach (i.e. assignment evaluated with a rubric, pre-post test, etc.).

All students are required to do 240 Hr work experience. We will ask the Work Experience supervisors to assess students to each of these outcomes using a rubric that describes student achievement at 5 levels. The rubric is under development, but the concept of using employer assessments has been piloted in prior years, and we expect this approach to be successful.

Self-Reflection, which is not clearly tied to one of our program outcomes, can be assessed in the Work Experience Seminar that is a co-requisite for Work Experience.

1. Indicate which components will be addressed in Year 1 (2010-11) and Year 2 (2011-12).

All of the BIT outcomes can be assessed at once, in the work experience setting using the rubric, so it possible to carry out this assessment with each group of students doing their final Work Experience in Year 1, and every year thereafter.

For Self-reflection, students already do reflection assignments in BIT 280B. Rubrics to assess these will be developed and used in Year 2