



SKYLINE COLLEGE ANNUAL PROGRAM PLANNING SELF-STUDY

Note: To complete this form, SAVE it on your computer, then send to your Division Dean/VPI as an ATTACHMENT on an e-mail message.

Program Title

Date Submitted

Key Findings:

1. Planning Group Participants (include PT& FT faculty, staff, students, stakeholders)

List of names and positions:

2. Contact Person (include e-mail and telephone):

3. Program Information

A. Program Personnel

Identify the number of personnel (administrators, faculty, classified, volunteers, and student workers) in the program:

FT Faculty:

PT/OL Faculty (FTE):

FT Classified:

PT Classified (FTE):

Volunteers:

Student Workers:

B. Program mission and goals

State the goals/focus of the program and how the program contributes to the mission and priorities of the College and District. **Address how the program meets the current year's strategic priorities.** (200 word limit is recommended.)

4. Program/Service Area Student Learning Outcomes and Program Data

A. Summarize recent course (for instruction, including student service courses) or program (for student services and every three years, CTE programs) SLO assessment, **identify trends and discuss areas in need of improvement. Please attach summary Tracdat reports with assessment and analysis for SLOs evaluated during the last two years** (prior to submission deadline of April 1st). (200 word limit is recommended.) Tool: <https://sanmateo.tracdat.com/tracdat/>

B. Analyze evidence of Program performance. Review and analyze productivity, student characteristics and outcomes. (200 word limit is recommended.)

Tool: <http://www.skylinecollege.edu/prie/programdata.php>

C. Explain how other information may impact Program (examples are business and employment needs, new technology, new transfer requirements etc.)
(200 word limit is recommended.)

5. Curricular Offerings

A. Program Curriculum and Courses. If your program does not offer curriculum, please state “N/A”. Tools: CurricUNET <http://www.curricunet.com/smcccd>; <https://sanmateo.tracdat.com/tracdat/>

Respond to the following:

- What new courses (excluding individual Selected Topics [665] topics and Experimental [680/880] courses) have you added to your program curriculum in the past academic year? List by Department, Course Number and Course Title.
- Note that you’ve added new courses to the department’s three-year calendar of assessment and requested that they be added to TracDat.
- Note that you’ve done the following for new courses on TracDat:
 - Uploaded SLOs?
 - Mapped course-level SLOs to PSLOs (including relevant interdisciplinary degrees) and ISLOs?
 - Uploaded assessment method(s) (need not be specific)?

B. Identify Patterns of Curriculum Offerings

Respond to the following:

- Identify the planning group's two-year curriculum cycle of course offerings by certificates and degrees.
- Describe the ideal curriculum cycle.
- Discuss any issues.

6. Response to Previous Annual Program Plan & Review

List any recommendations for the program and your responses to these recommendations based on previous Annual Program Plan and/or CTE Professional Accreditation report.

7. Action Plan

Provide your action plan based on the analysis and reflections provided in the previous sections.
Note: resource requests should be connected to action plans

Respond to the following:

- Describe data and assessment results for SLO assessment on the course level (for instruction, including student service courses) or program level (for student services or every three years, career technical education programs). Analyze and reflect on SLO assessment results and other measures of Program performance.
- Analyze and reflect on other evidence described in previous sections. Identify the next steps, including any planned changes to curriculum and pedagogy.
- Identify questions that will serve as a focus of inquiry for next year.

8. Resource Identification

A. Professional Development needs

B. Office of Planning, Research & Institutional Effectiveness requests

Actions:

- List data requests for the Office of Planning, Research & Institutional Effectiveness.
- Explain how the requests will serve the Student/Program/Division/College needs.

C. Faculty and Staff hiring, Instructional Equipment and Facilities Requests

Complete the following table:

Annual Program Planning Resource Needs
 Program _____ Date _____

	Needs	How does this request align with your assessment of student outcomes	How does this request align with your action plan	Estimated cost for facilities and equipment
Personnel	1. 2. 3.			
Equipment	1. 2. 3. 4.			
Facilities	1. 2. 3. 4.			

Course Assessment Report-- Four Column

San Mateo CCCD SKY Dept - Chemistry

Department Assessment Janice McOmber
Coordinator:

Course Outcomes	Means of Assessment & Success Criteria / Tasks	Results	Action & Follow-Up
SKY Dept - Chemistry - SKY CHEM 112 - Chemistry in Action - Chemical equation - Interpret the meaning of a chemical equation and relate it to the physical materials involved in the process. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 Start Date: 08/16/2011 End Date: 06/18/2014 Course Outcome Status: Active	Assessment Method: Students were given a quiz about halfway through the course, after the chapter on batteries was completed. Assessment Method Category: Exam Success Criterion: Students will equal or exceed the results observed for Spring 2012 for communication of how a battery is diagrams and for the chemical equation, related to the physical materials involved in the process (Communications question=9.7 of 10 and equation question 7.3 of 10).	05/12/2013 - Criterion Met-- Additional work was done with assigned homework and worksheets. The communication question yield a matching result of 9.7/10. The chemical equation question improved from 7.3 (spring 2012) to 9.4 out of 10. Result Type: Criterion met Reporting Cycle: 2012 - 2013 Related Documents: chem112slospring2013.pdf	
	Assessment Method: The "Types of chemical reactions" lab will be accessed Assessment Method Category: Other Success Criterion: 75% average score	06/19/2014 - Average 11.3'15 with a standard deviation of 3.1 = 75% Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem11252014.pdf	
SKY Dept - Chemistry - SKY CHEM 112 - Chemistry in Action - Analyze what's read - Critically analyze and raise questions about claims on products or reports in the popular press. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 Start Date: 08/16/2011 End Date: 06/30/2014	Assessment Method: Quiz after the section on batteries. Students need to draw a cell and describe it. Assessment Method Category: Exam Success Criterion: Students can answer the quiz questions demonstrating understanding of a battery.	06/16/2012 - Criterion Met-- Students demonstrated an understanding of a battery. Result Type: Criterion met Reporting Cycle: 2011 - 2012 Related Documents: Chemistry 112 Spring 2012 SLO.pdf	
	Assessment Method: Ph property lab will be accessed Assessment Method Category:	06/19/2014 - Average = 15/15 = 100% Result Type: Criterion met	

Course Outcomes	Means of Assessment & Success Criteria / Tasks	Results	Action & Follow-Up
Course Outcome Status: Active	Other Success Criterion: 75% average score for the lab	Reporting Cycle: 2013 - 2014 Related Documents: chem11252014.pdf	
SKY Dept - Chemistry - SKY CHEM 112 - Chemistry in Action - Household chemistry safety - Apply basic chemical knowledge to safe use of household chemicals including acids and bases, oxidizers, and flammable compounds. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 Start Date: 08/16/2011 End Date: 06/30/2014 Course Outcome Status: Active	Assessment Method: The MSDS, vinegar and glacial acetic acid and aspirin labs will be accessed Assessment Method Category: Other Success Criterion: 75% average lab score	06/19/2014 - Average = 13/15 with a standard deviation of 3.1 = 87% Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem11252014.pdf	
SKY Dept - Chemistry - SKY CHEM 112 - Chemistry in Action - Experimental results - Carry out a chemical experiment to test a hypothesis and critically analyze the results. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 Start Date: 08/16/2011 End Date: 06/30/2014 Course Outcome Status: Active	Assessment Method: The Heat of Combustion lab will be accessed. Assessment Method Category: Other Success Criterion: 75% average in lab	06/19/2014 - average = 15/15 = 100% Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem11252014.pdf	
SKY Dept - Chemistry - SKY CHEM 210 - General Chemistry I - molecule structure - Properly describe and depict the electron arrangements, the nature of chemical bonding, and the three-dimensional structures of atoms, ions, and molecules. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014	Assessment Method: Grade the molecular model lab assignments in the Chemistry 210 lab Assessment Method Category: Other Success Criterion: Students correctly draw Lewis dot structures for 75% of the assigned structures and correctly state the geometry of 75% of the structures.	01/12/2014 - Students average 83% overall on the Electron Dot and Molecular Model labs. Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: Chem210slo.pdf	

Course Outcomes	Means of Assessment & Success Criteria / Tasks	Results	Action & Follow-Up
Start Date: 08/16/2011 Course Outcome Status: Active	Related Documents: Chem210slo.pdf		
SKY Dept - Chemistry - SKY CHEM 220 - General Chemistry II - Kinetics, thermodynamics - Quantitatively analyze the kinetics and thermodynamics of chemical reactions. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 Start Date: 01/18/2012 End Date: 01/31/2014 Course Outcome Status: Active	Assessment Method: The questions are put onto the final lab exam. Assessment Method Category: Exam Success Criterion: Students will score an average of 67% or better. Related Documents: chem220, spring 2012	01/12/2014 - Students average 74% on this question, placed on the final lab exam, similar to past semesters. Result Type: Criterion met Reporting Cycle: 2013 - 2014 06/08/2012 - Criterion Met-- Students averaged 69% on this series during the second lab exam for spring 2012. Result Type: Criterion met Reporting Cycle: 2011 - 2012	
	Assessment Method: A similar question (to past semesters) will be used, across all sections to evaluate the student's knowledge of kinetics of chemical reactions. Assessment Method Category: Exam Success Criterion: 66% or better.	01/28/2014 - 74% average on this question on the lab exam Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem220slofall13.pdf	
SKY Dept - Chemistry - SKY CHEM 220 - General Chemistry II - Equilibrium constant - Describe the aqueous equilibria, including systems of acids, bases, buffers, ions with limited solubility (precipitations), and complex ions. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 Start Date: 08/16/2011 End Date: 01/31/2014 Course Outcome Status: Active	Assessment Method: Successfully carry out an acid/base/buffer question, and makes use of the ICE table and Henderson Hasselbalch equation to determine [H+] and pH of a weak acid initially and after different amounts of base is added.. Assessment Method Category: Exam Success Criterion: Class average is greater than 10 out of 15 points.	01/28/2014 - 74% on this question on the second lab exam, fall 2013 Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem220slofall13.pdf 04/24/2012 - Criterion Met-- The average of the two sections taking this exam was 67.6% barely above the 66.7% for the success criterion. Result Type: Criterion met Reporting Cycle: 2011 - 2012 Related Documents:	

Course Outcomes	Means of Assessment & Success Criteria / Tasks	Results	Action & Follow-Up
		Fall 2011 Chemistry 220 SLO 09/29/2011 - Criterion Met-- One section, 27 students (summer session) average 10.1 +- 4.1 of 15 points (barely above the 66.7% success criterion.) Result Type: Criterion met Reporting Cycle: 2011 - 2012 Related Documents: summer2011 Preliminary try at a SLO for Chemi 220	
	Assessment Method: These questions will be covered in the second lab exam. Questions, similar to past semesters will evaluate the students' knowledge of equilibrium. Assessment Method Category: Exam Success Criterion: 66% or better		
SKY Dept - Chemistry - SKY CHEM 220 - General Chemistry II - Electrochemical cells - Interpret, diagram, and build electrochemical cells. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 Start Date: 08/16/2011 End Date: 01/31/2014 Course Outcome Status: Active	Assessment Method: Grade the electrochemical cell lab report and report the score. Success Criterion: 75% on the lab score for this lab.	01/28/2014 - 74% on the electrochemical labs. Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem220slofall13.pdf	
SKY Dept - Chemistry - SKY CHEM 220 - General Chemistry II - Experimental results - Perform experiments using common laboratory techniques and equipment to make quantitative observations about physical and chemical properties. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014	Assessment Method: Lab scores for three representative labs will be evaluated across all sections. Assessment Method Category: Other Success Criterion: 70% or better	01/28/2014 - 81% average for the three labs. Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem220slofall13.pdf	

Course Outcomes	Means of Assessment & Success Criteria / Tasks	Results	Action & Follow-Up
Start Date: 08/16/2011 End Date: 01/31/2014 Course Outcome Status: Active			
SKY Dept - Chemistry - SKY CHEM 410 - Chem For Health Sciences - Chemical language - Communicate ideas and experimental results using chemical formulas, names, symbols, and equations. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 Start Date: 08/16/2011 End Date: 06/30/2014 Course Outcome Status: Active	Assessment Method: The students are asked four multiple choice questions covering five major topics for the course: The topics are: specific gravity, a three step dimensional analysis question (dosing), recognizing biological functional groups, recognize biological groups and balancing a combustion reaction. Assessment Method Category: Exam Success Criterion: Students should be able to score at least 3 of 5 correctly (60%)	07/15/2012 - Criterion Met-- Students averaged 60% spring 2012 and Result Type: Criterion met Reporting Cycle: 2011 - 2012 Related Documents: Chemistry 410 SLO spring2012.pdf chem 410, fall 2011	
	Assessment Method: The lab score for the Moles and Chemical Formula Lab will be accessed. Assessment Method Category: Other Success Criterion: 70% average	06/19/2014 - average 84% over four sections Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem41062014.pdf	
SKY Dept - Chemistry - SKY CHEM 410 - Chem For Health Sciences - problem solving - Apply a variety of problem-solving techniques including algebraic manipulations, dimensional analysis, and stoichiometric calculations to quantitatively analyze chemical reactions. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 End Date: 06/30/2014 Course Outcome Status: Active	Assessment Method: Multiple choice question on the final exam Assessment Method Category: Exam Success Criterion: 70%	06/19/2014 - 78% average over 4 sections Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem41062014.pdf	
SKY Dept - Chemistry - SKY CHEM 410 - Chem For Health Sciences	Assessment Method: The energy and matter lab will be accessed	06/19/2014 - 90% average over four sections	

Course Outcomes	Means of Assessment & Success Criteria / Tasks	Results	Action & Follow-Up
- lab experimentation - Perform experiments using common laboratory techniques and equipment to make quantitative observations about physical and chemical properties (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 End Date: 06/30/2014 Course Outcome Status: Active	Assessment Method Category: Other Success Criterion: 70% average	Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem41062014.pdf 06/19/2014 - 90% average over four sections Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem41062014.pdf	
SKY Dept - Chemistry - SKY CHEM 410 - Chem For Health Sciences - Analyze lab findings - Critically analyze laboratory findings, discuss results in written form, and draw appropriate conclusion from the observed data. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 End Date: 06/30/2014 Course Outcome Status: Active	Assessment Method: The Cations/anions lab will be assessed Assessment Method Category: Other Success Criterion: 70% score on the lab	06/19/2014 - Four sections averaged 92% Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem41062014.pdf	
SKY Dept - Chemistry - SKY CHEM 410 - Chem For Health Sciences - biological structures - Describe the structures, functions, and reactions of organic molecules and biological macromolecules. (Created By SKY Dept - Chemistry) Assessment Cycles: 2013-2014 End Date: 06/30/2014 Course Outcome Status: Active	Assessment Method: The alcohol lab will be assessed, and two multiple choice questions on the final will also be assessed Assessment Method Category: Other Success Criterion: 70% average	06/19/2014 - The alcohol lab average was 86% average over 4 sections. The two multiple choice questions averaged 46% over four sections. Result Type: Criterion met Reporting Cycle: 2013 - 2014 Related Documents: chem41062014.pdf	