2013-2014 ANNUAL ASSESSMENT REPORT TEMPLATE

This template intends to make our annual assessment and its reports simple, clear, and of high quality not only for this academic year but also for the years to come. Thus, it explicitly specifies some of the best assessment practices and/or expectations implied in the four WASC assessment rubrics we have used in the last few years (see the information below* that has appeared in Appendices 1, 2a, 2b, and 7 in the ***Feedback for the 2011-2012 Assessment Report;*** Appendix 2 in the ***Feedback for the 2012-2013 Assessment Report***, and Appendices 5 to 8 in the ***2013-2014 Annual Assessment Guideline)***.

We understand some of our programs/departments have not used and/or adopted these best practices this year, and that is okay. You do not need to do anything extra this year, and ALL YOU NEED TO DO is to report what you have done this academic year. However, we hope our programs will use many of these best practices in the annual assessment in the future.

We also hope to use the information from this template to build a digital database that is simple, clear, and of high quality. If you find it necessary to modify or refine the wording or the content of some of the questions to address the specific needs of your program, please make the changes and highlight them in red. We will consider your suggestion(s). Thank you!

If you have any questions or need any help, please send an email to Dr. Amy Liu (liuqa@csus.edu), Director of University Assessment. We are looking forward to working with you.

*The four WASC rubrics refer to: 1) WASC "Rubric for Assessing the Quality of Academic Program Learning Outcomes"; 2) WASC "Rubric for Assessing the Use of Capstone Experience for Assessing Program Learning Outcomes"; 3) WASC "Rubric for Assessing the Use of Portfolio for Assessing Program Learning Outcomes"; and 4) WASC "Rubric for Assessing the Integration of Student Learning Assessment into Program Reviews".

Part 1: Background Information

B1. Program name: [_Chemistry (we assess at department level so all five degree programs are included__]

B2. Report author(s): [_Linda Roberts_]

B3. Fall 2012 enrollment: [_415____]
Use the *Department Fact Book 2013* by OIR (Office of Institutional Research) to get the fall 2012 enrollment: (http://www.csus.edu/oir/Data%20Center/Department%20Fact%20Book/Departmental%20Fact%20Book.html).

B4. Program type: [SELECT ONLY ONE]

X	1. Undergraduate baccalaureate major
	2. Credential
	3. Master's degree
	4. Doctorate: Ph.D./E.D.D.
	5. Other, specify:

Part 2: Six Questions for the 2013-2014 Annual Assessment

Question 1 (Q1): Program Learning Outcomes (PLO) Assessed in 2013-2014.

Q1.1. Which of the following program learning outcomes (PLOs) or Sac State Baccalaureate Learning Goals did you assess **in 2013-2014**? (See 2013-2014 Annual Assessment Report Guidelines for more details). [**CHECK ALL THAT APPLY]**

	1. Critical thinking (WASC 1) *
X	2. Information literacy (WASC 2)
X	3. Written communication (WASC 3)
X	4. Oral communication (WASC 4)
X	5. Quantitative literacy (WASC 5)
X	6. Inquiry and analysis
	7. Creative thinking
	8. Reading
	9. Team work
X	10. Problem solving
	11. Civic knowledge and engagement – local and global
	12. Intercultural knowledge and competency
	13. Ethical reasoning
	14. Foundations and skills for lifelong learning
	15. Global learning
X	16. Integrative and applied learning
	17. Overall competencies for GE Knowledge
X	18. Overall competencies in the major/discipline
X	19. Others. Specify any PLOs that were **assessed in 2013-2014 but not included above:** a. Laboratory skills b. c.

* One of the WASC's new requirements is that colleges and universities report on the level of student performance **at graduation** in five core areas: **critical thinking, information literacy, written communication, oral communication, and quantitative literacy.**

Q1.1.1. Please provide more detailed information about the PLO(s) you checked above:
Program learning goals:

Learning Outcome	Q 1.1	Measurement tool	Evaluation
A. Laboratory Knowledge and Skills			
1. the basic analytical and technical skills to work effectively in the various fields of chemistry	19	Capstone project	Multiple faculty evaluation during department poster session
2. the ability to perform accurate quantitative measurements with an understanding of the theory	5, 16,	Capstone project	Multiple faculty evaluation during department poster

and use of contemporary chemical instrumentation, interpret experimental results, perform calculations on these results and draw reasonable, accurate conclusions.			session
3. the ability to synthesize, separate and characterize compounds using published reactions, protocols, standard laboratory equipment, and modern instrumentation.		Not assessed at program level	N/A
4. the ability to use information technology tools such as the Internet and computer-based literature searches as well as printed literature resources to locate and retrieve scientific information needed for laboratory or theoretical work.	2, 19	Capstone project	Multiple faculty evaluation during department poster session
5. the ability to present scientific and technical information resulting from laboratory experimentation in both written and oral formats.	3, 4	Capstone project	Multiple faculty evaluation during department poster session
6. knowledge and understanding of the issues of safety regulations in the use of chemicals in their laboratory work.		Not assessed at program level	N/A
B. Computer, Library and Information Skills			
1. the ability to make effective use of the library and other information resources in chemistry, including the primary literature, tabulated data, and secondary sources such as the Internet.	2	Capstone project	Multiple faculty evaluation during department poster session
2. the ability to make effective use of computers in chemistry applications using standard and chemistry specific software packages.		Capstone project	Multiple faculty evaluation during department poster session
3.the ability to perform and interpret simple molecular modeling or chemical computations using standard software		Not assessed at program level	N/A
C. Oral and Written Communication Skills in Chemistry			
1. adequate skills in technical writing and oral presentations.	2, 3	Capstone project	Multiple faculty evaluation during department poster session
2. the ability to communicate scientific information in oral and written formats to both scientists and	2, 3	Capstone project	Multiple faculty evaluation during department poster

nonscientists.			session
D.Quantitative Reasoning Skills			
1. ability to accurately collect and interpret numerical data.	5, 6, 10	Capstone project	Multiple faculty evaluation during department poster session
2.ability to solve problems competently using extrapolation, approximation, precision, accuracy, rational estimation and statistical validity.	5, 6, 10	Capstone project	Multiple faculty evaluation during department poster session
3.proficiency in the scientific method (formulating hypotheses and arriving at appropriate answers and conclusions)	6, 10	Capstone project	Multiple faculty evaluation during department poster session
E. Knowledge of Chemical Principles and Facts			
1.a working knowledge of chemical principles appropriate to a chemistry degree program to include thermodynamics, equilibrium, kinetics, quantum mechanics, structures of materials, reactivities of substances, synthesis, isolation and identification of compounds.	18	ACS Standardized Exam[2]	Comparison to national scores
2. a mastery of a broad set of factual chemical knowledge concerning the properties of substances, molecules, and atoms.	18	ACS Standardized Exam	Comparison to national scores

Q1.2. Are your PLOs closely aligned with the mission of the university?

X	1. Yes
	2. No
	3. Don't know

Q1.3. Is your program externally accredited (except for WASC)?

	1. Yes
X	2. No **(If no, go to Q1.4)**
	3. Don't know (**Go to Q1.4)**

Q1.3.1. If yes, are your PLOs closely aligned with the mission/goals/outcomes of the accreditation agency?

	1. Yes
	2. No
	3. Don't know

Q1.4. Have you used the *Degree Qualification Profile* (DQP)* to develop your PLO(s)?

	1. Yes
	2. No, but I know what DQP is.
X	3. No. I don't know what DQP is.
	4. Don't know

* **Degree Qualifications Profile (DQP)** – a framework funded by the Lumina Foundation that describes the kinds of learning and levels of performance that may be expected of students who have earned an associate, baccalaureate, or master's degree. Please see the links for more details: http://www.luminafoundation.org/publications/The_Degree_Qualifications_Profile.pdf and http://www.learningoutcomeassessment.org/DQPNew.html.

Question 2 (Q2): Standards of Performance/Expectations for EACH PLO.

Q2.1. Has the program developed/adopted **EXPLICIT** standards of performance/expectations for the PLO(s) you assessed **in 2013-2014 Academic Year**? (For example: We expect 70% of our students to achieve at least a score of 3 on the Written Communication VALUE rubric.)

	1. Yes, we have developed standards/expectations for **ALL** PLOs assessed in 2013-14.
	2. Yes, we have developed standards/expectations for **SOME** PLOs assessed in 2013-14.
X	3. No (**If no, go to Q2.2)**
	4. Don't know (**Go to Q2.2)**
	5. Not Applicable (**Go to Q2.2)**

Q2.1.1. If yes, what are the desired levels of learning, including the criteria and standards of performance/expectations, especially at or near graduation, for **EACH PLO** assessed in 2013-2014 Academic Year? (For example: what will tell you if students have achieved your expected level of performance for the learning outcome.) **Please provide the rubric and/or the expectations that you have developed for EACH PLO one at a time below.** [WORD LIMIT: 300 WORDS FOR EACH PLO]

Q2.2. Have you published the **PLO(s)/expectations/rubric(s) you assessed in 2013-2014**?

	1. Yes
X	2. No **(If no, go to Q3.1)**

Q2.2.1. If yes, where were the **PLOs/expectations/rubrics** published? **[CHECK ALL THAT APPLY]**

	1. In **SOME course syllabi/assignments** in the program that claim to introduce/develop/master the PLO(s)
	2. In **ALL course syllabi/assignments** in the program that claim to introduce /develop/master the PLO(s)
	3. In the student handbook/advising handbook
	4. In the university catalogue
	5. On the academic unit website or in the newsletters
	6. In the assessment or program review reports/plans/resources/activities
	7. In the new course proposal forms in the department/college/university
	8. In the department/college/university's strategic plans and other planning documents
	9. In the department/college/university's budget plans and other resource allocation

	documents
	10. In other places, specify:

Question 3 (Q3): Data, Results, and Conclusions for EACH PLO

Q3.1. Was assessment data/evidence **collected** for 2013-2014?

X	1. Yes
	2. No **(If no, go to Part 3: Additional Information)**
	3. Don't know **(Go to Part 3)**
	4. Not Applicable **(Go to Part 3)**

Q3.2. If yes, was the data **scored/evaluated** for 2013-2014?

X	1. Yes
	2. No **(If no, go to Part 3: Additional Information)**
	3. Don't know **(Go to Part 3)**
	4. Not Applicable **(Go to Part 3)**

Q3.3. If yes, what **DATA** have you collected? What are the **results, findings, and CONCLUSION(s)** for EACH PLO assessed in 2013-2014? In what areas are students doing well and achieving the expectations? In what areas do students need improvement? Please provide a simple and clear summary of the key data and findings, including **tables and graphs** if applicable for EACH PLO one at a time. [WORD LIMIT: 600 WORDS FOR EACH PLO]

PLO's A-C are assessed in laboratory capstone projects. PLO E is assessed via national standardized American Chemical Society Exams. We currently do not have a good direct assessment of PLO D. The departmental poster rubric indirectly addresses PLO D since students must successfully employ quantitative analysis and reasoning to successfully complete a laboratory capstone project. PLO D is also covered indirectly in ACS exams. The department should revise its poster rubric and develop an ACS exam analysis to more specifically address this PLO.

PLO A-C. Assessment tool - departmental capstone poster project rubric

Scores below are out of five total possible points. The first column in each table refers to the poster rubric item of the departmental poster rubric used by faculty to evaluate capstone projects displayed at each semester's departmental poster session. The expectation associated with each rubric item is given at right hand side of the table.

PLO A.	**Laboratory Knowledge and Skills**					
Rubric item	**CHEM 110L**	**CHEM 125**	**CHEM 133**	**CHEM 141**	**CHEM 164**	
4	4.75	4.71	4.2	4.36	4.33	shows an ability to use instrumentation useful in solving or doing problem
5	4.69	4.58	4.5	4.54	4.19	collected reasonable data useful in solving or doing the problem
9	5	4.54	4.6	4.71	4.31	demonstrates effective learning of several laboratory skills

PLO B.	**Computer, Library, and Information Skills**

Rubric item	CHEM 110L	CHEM 125	CHEM 133	CHEM 141	CHEM 164	
6	4.44	4.35	4.1	4.68	4.36	uses literature properly in presentation
8	4.88	4.17	4.4	4.79	4.17	uses technical vocabulary correctly

PLO C.	Oral and Written Communication Skills in Chemistry					
Question	CHEM 110L	CHEM 125	CHEM 133	CHEM 141	CHEM 164	
1	4.75	4.62	4.5	4.93	4.22	demonstrates effective organization of their poster (shows effectively the problem and how problem was attacked and solved)
2	4.75	4.29	4.4	4.68	4.14	demonstrates effective use of graphs and other visual aids
3	4.5	4.38	4.4	4.5	3.78	uses effective writing (good grammar, spelling, coherent writing, clear exposition)
7	4.69	4.33	4.1	4.61	3.72	supports their generalizations and conclusions with adequate and sound evidence

Key findings - PLO A-C

With the exception of two scores in Chem 164 for PLO C, all of the scores for PLO's A-C are above 4 on a scale of 1-5, indicating students are performing well in these learning outcomes. As we've observed in previous years, the scores are generally highest in Chem 110L and Chem 141. We believe this is due to the fact that students in these courses have taken a capstone course (usually 125) beforehand and are therefore doing a capstone project for the second time. Chem 164 historically has had the lowest scores. We are not totally sure why this is but the Biochemistry faculty need to discuss this problem and how to address it.

PLO D – see comments above

PLO E. Assessment tool – standardized ACS exams

	Number of students	Class Average	Percentile	National Norm
CHEM 124				
1 (Fall 2013)	20	34	44	37
2 (Fall 2013)	49	36	51	
1 (Spring 2014)	48	39	60	

2 (Spring 2014)	63	35	48	
CHEM 110	9	41	84	32
CHEM 160B*				

*The ACS exam was adminstered in 160B but the instructor did not provide data in time for the assessment report.

Key findings, PLO E.

ACS exam scores in 124 are close to the national average, as we've consistently observed for this course over the years. The variation observed over four sections in 2013-2014 is pretty similar to previous years and is not instructor-dependent. We are actually pretty satisfied with this result as the students taking this course frequently come into it having taken the first semester of organic chemistry at a community college and the students' preparation for 124 therefore varies a lot. Also as we've consistently observed in previous years, the class average in Chem 110 is much higher than the national norm. Chem 110, Inorganic Chemistry, is one of the final upper division courses the BS Chemistry majors take. To make it to this course, they must successfully pass three semesters of calculus and a year of physical chemistry. In addition to this rigorous preparation, Inorganic Chemistry integrates many of the concepts learned in previous courses. The department chair has asked students how they feel about this course and a common response is that students feel this is where they really understand why all of their previous learning was important. They feel they really gain a deep appreciation for molecular structure and bonding in Chem 110. Although data for Chem 160B was not provided to the department chair in time for this report, historically students in this course perform close to the national average.

Q3.4. Do students meet the expectations/standards of performance as determined by the program and achieved the learning outcomes? [PLEASE MAKE SURE THE PLO YOU SPECIFY HERE IS THE SAME ONE YOU CHECKED/SPECIFIED IN Q1.1].

PLEASE NOTE: It is not possible to match the list in Q1.1 when our PLO's are not written in that same wording and format. Therefore, I am answering this question with reference to our PLO's, rather than the list in Q1.1, since this most closely matches our assessment results.

Q3.4.1. First PLO: [_____PLO A, _Laboratory Knowledge and Skills ____]

	1. Exceed expectation/standard
X	2. Meet expectation/standard
	3. Do not meet expectation/standard
	4. No expectation/standard set
	5. Don't know

[NOTE: IF YOU HAVE MORE THAN ONE PLO, YOU NEED TO REPEAT THE TABLE IN Q3.4.1 UNTIL YOU INCLUDE ALL THE PLO(S) YOU ASSESSED IN 2013-2014.]

Q3.4.2. Second PLO: [____PLO B, Computer, Library and Information Skills___]

	1. Exceed expectation/standard
X	2. Meet expectation/standard
	3. Do not meet expectation/standard
	4. No expectation/standard set

	5. Don't know

Q3.4.3. Third PLO: [____PLO C, Oral and Written Communication in Chemistry__]

	1. Exceed expectation/standard
X	2. Meet expectation/standard
	3. Do not meet expectation/standard
	4. No expectation/standard set
	5. Don't know

Q3.4.4. Fourth PLO: [____PLO E, Knowledge of Chemical Principles and Facts_]

	1. Exceed expectation/standard
X	2. Meet expectation/standard
	3. Do not meet expectation/standard
	4. No expectation/standard set
	5. Don't know

Question 4 (Q4): Evaluation of Data Quality: Reliability and Validity.

Q4.1. How many PLOs **in total** did your program **assess in the 2013-2014 academic year**? [4 of 5]

Q4.2. Please choose **ONE ASSESSED PLO** as an example to illustrate how you use direct, indirect, and/or other methods/measures to collect data. If you only assessed one PLO **in 2013-14**, YOU CAN SKIP this question. If you assessed MORE THAN ONE PLO, please check **ONLY ONE PLO BELOW EVEN IF YOU ASSESSED MORE THAN ONE PLO IN 2013-2014.**

	1. Critical thinking (WASC 1) [1]
	2. Information literacy (WASC 2)
	3. Written communication (WASC 3)
	4. Oral communication (WASC 4)
	5. Quantitative literacy (WASC 5)
	6. Inquiry and analysis
	7. Creative thinking
	8. Reading
	9. Team work
	10. Problem solving
	11. Civic knowledge and engagement – local and global
	12. Intercultural knowledge and competency
	13. Ethical reasoning
	14. Foundations and skills for lifelong learning
	15. Global learning
	16. Integrative and applied learning
	17. Overall competencies for GE Knowledge
X	18. Overall competencies in the major/discipline
	19. Other PLO.

Direct Measures

Q4.3. Were direct measures used to assess this PLO?

X	1. Yes
	2. No **(If no, go to Q4.4)**
	3. Don't know **(Go to Q4.4)**

Q4.3.1. Which of the following DIRECT measures were used? **[Check all that apply]**

	1. Capstone projects (including theses, senior theses), courses, or experiences
	2. Key assignments from other CORE classes
	3. Key assignments from other classes
	4. Classroom based performance assessments such as simulations, comprehensive exams, critiques
	5. External performance assessments such as internships or other community based projects
	6. E-Portfolios
	7. Other portfolios
X	8. Other measure. Specify: Standardized national ACS exams

Q4.3.2. Please provide the direct measure(s) **[key assignment(s)/project(s)/portfolio(s)]** that you used to collect the data. [WORD LIMIT: 300 WORDS]

Standardized national ACS exams were administered in three courses.

Q4.3.2.1. Was the direct measure(s) [**key assignment(s)/project(s)/portfolio(s**)] aligned directly with the rubric/criterion**?**

X	1. Yes
	2. No
	3. Don't know

Q4.3.3. Was the direct measure (s) [key assignment(s)/project(s)/portfolio(s)] aligned directly with the PLO?

X	1. Yes
	2. No
	3. Don't know

Q4.3.4. How was the evidence scored/evaluated? **[Select one only**]

X	1. No rubric is used to interpret the evidence (If checked, go to Q4.3.7)
	2. Use rubric developed/modified by the faculty who teaches the class
	3. Use rubric developed/modified by a group of faculty
	4. Use rubric pilot-tested and refined by a group of faculty
	5. Use other means. Specify: Key provided by ACS

Q4.3.5. What rubric/criterion was adopted to score/evaluate the above key assignments/projects/portfolio? **[Select one only**]

	1. The VALUE rubric(s)
	2. Modified VALUE rubric(s)
	3. A rubric that is totally developed by local faculty
X	4. Use other means. Specify: Exam key provided by ACS

Q4.3.6. Was the rubric/criterion aligned directly with the PLO?

	1. Yes
	2. No
	3. Don't know

Q4.3.7. Were the evaluators (e.g., faculty or advising board members) who reviewed student work calibrated to apply assessment criteria in the same way?

X	1. Yes
	2. No
	3. Don't know

Q4.3.8. Were there checks for inter-rater reliability?

	1. Yes
X	2. No
	3. Don't know

Q4.3.9. Were the sample sizes for the direct measure adequate?

X	1. Yes
	2. No
	3. Don't know

Q4.3.10. How did you select the sample of student work (papers, projects, portfolios, etc)? Please briefly specify here:

All students in the courses in which the exam was administered were required to take the exam as the final exam for the course.

Indirect Measures

Q4.4. Were indirect measures used to assess the PLO?

X	1. Yes
	2. No **(If no, go to Q4.5)**

Q4.4.1. Which of the following indirect measures were used?

	1. National student surveys (e.g., NSSE, etc.)
	2. University conducted student surveys (OIR surveys)
X	3. College/Department/program conducted student surveys
	4. Alumni surveys, focus groups, or interviews
	5. Employer surveys, focus groups, or interviews
	6. Advisory board surveys, focus groups, or interviews
	7. Others, specify:

Q4.4.2. If surveys were used, were the sample sizes adequate?

X	1. Yes
	2. No
	3. Don't know

Q4.4.3. If surveys were used, please briefly specify how you select your sample? What is the response rate?

In Chem 160B, all students are given a survey containing questions about their preparation for the course, for example where they took their organic chemistry, whether they were doing independent research, whether they had also taken a biochemistry lab. All students in the course complete this survey and the results are compared to the students' ACS exam scores. This has allowed us to ascertain, for example, whether the location of the students' organic chem courses correlates with ACS exam score in biochemistry.

Other Measures

Q4.5. Were external benchmarking data used to assess the PLO?

X	1. Yes
	2. No **(If no, go to Q4.6)**

Q4.5.1. Which of the following measures was used?

X	1. National disciplinary exams or state/professional licensure exams
	2. General knowledge and skills measures (e.g., CLA, CAAP, ETS PP, etc)
	3. Other standardized knowledge and skill exams (e.g., ETS, GRE, etc)
	4. Others, specify:

Q4.6. Were other measures used to assess the PLO?

	1. Yes
X	2. No **(Go to Q4.7)**
	3. Don't know **(Go to Q4.7)**

Q4.6.1. If yes, please specify: [_____]

Alignment and Quality

Q4.7. Please describe how you collected the data? For example, in what course(s) (or by what means) were data collected? How reliable and valid is the data? [WORD LIMIT: 300 WORDS]

Collection answered above. Data is reliable in that all students take the same multiple choice exam, regardless of instructor or semester, and are scored in exactly the same way using the same key.

Q4.8. How many assessment tools/methods/measures **in total** did you use to assess this PLO? [__1___]
NOTE: IF IT IS ONLY ONE, GO TO Q5.1.

Q4.8.1. Did the data (including all the assignments/projects/portfolios) from all the different assessment tools/measures/methods directly align with the PLO?

	1. Yes
	2. No
	3. Don't know

Q4.8.2. Were **ALL** the assessment tools/measures/methods that were used good measures for the PLO?

	1. Yes
	2. No
	3. Don't know

Question 5 (Q5): Use of Assessment Data.

Q5.1. To what extent have the assessment results **from 2012-2013** been used for? **[CHECK ALL THAT APPLY]**

	Very Much (1)	Quite a Bit (2)	Some (3)	Not at all (4)	Not Applicable (9)
1. Improving specific courses			X		
2. Modifying curriculum			X		
3. Improving advising and mentoring			X		
4. Revising learning outcomes/goals				X	X
5. Revising rubrics and/or expectations					X
6. Developing/updating assessment plan					X
7. Annual assessment reports					X
8. Program review					X
9. Prospective student and family information					X
10. Alumni communication					X
11. WASC accreditation (regional accreditation)					X
12. Program accreditation					X
13. External accountability reporting requirement					X
14. Trustee/Governing Board deliberations					X
15. Strategic planning					X
16. Institutional benchmarking					X
17. Academic policy development or modification					X
18. Institutional Improvement					X
19. Resource allocation and budgeting					X
20. New faculty hiring					X
21. Professional development for faculty and staff					X
22. Other Specify:					

Q5.1.1. Please provide one or two best examples to show how you have used the assessment data above.

An instructor in Chem 124 analyzed student performance on the organic chemistry exam:

Performed well	Performed poorly
constitutional isomers	base strength

formal charge	meso structures
nomenclature	ID from spectra
alkene stability	SN2
ID product w/ rxn and spectroscopy	organometallic/Michael
diastereomers	reductive amination
inequivalent nuclei	carbene chemistry
dihydroxylation	borane reductions
diels-alder	chirality on Fisher projection
diastereomers	NAS
ms	benzyne rxn
aromaticity	organometallics
resonance	
aldol	
mechanism	
resonance	

With this information, the instructor knows how to better allocate lecture time to topics where students need the most help.

Q5.2. As a result of the **assessment effort in 2013-2014** and based on the prior feedbacks from OAPA, do you anticipate making any changes for your program (e.g., course structure, course content, or modification of program learning outcomes)?

X	1. Yes
	2. No **(If no, go to Q5.3)**
	3. Don't know **(Go to Q5.3)**

Q5.2.1. What changes are anticipated? By what mechanism will the changes be implemented? How and when will you assess the impact of proposed modifications? [WORD LIMIT: 300 WORDS]

We are working on revising our PLO's to better match campus BLG's and WASC PLO's. This does not necessarily require a change in assessment, just in terminology.

We are developing a mechanism to track performance by program. Currently, it is done at a department, rather than program, level.

The department needs to modify the capstone rubric to better capture PLO D.

Q5.2.2. Is there a follow-up assessment on these areas that need improvement?

	1. Yes
X	2. No
	3. Don't know

Q5.3. Many academic units have collected assessment data on aspects of a program that are not related to program learning outcomes (i.e., impacts of an advising center, etc.). If your program/academic unit has collected assessment data in this way, please briefly report your results here. [WORD LIMIT: 300 WORDS]

Question 6 (Q6). Which program learning outcome(s) do you plan to assess next year?

See Q 1.1

	1. Critical thinking (WASC 1) [1]
	2. Information literacy (WASC 2)
	3. Written communication (WASC 3)
	4. Oral communication (WASC 4)
	5. Quantitative literacy (WASC 5)
	6. Inquiry and analysis
	7. Creative thinking
	8. Reading
	9. Team work
	10. Problem solving
	11. Civic knowledge and engagement – local and global
	12. Intercultural knowledge and competency
	13. Ethical reasoning
	14. Foundations and skills for lifelong learning
	15. Global learning
	16. Integrative and applied learning
	17. Overall competencies for GE Knowledge
	18. Overall competencies in the major/discipline
	19. Others. Specify any PLOs that the program is going to **assess but not included above:** a. b. c.

Part 3: Additional Information

A1. In which academic year did you **develop** the current assessment plan?

X	1. Before 2007-2008
	2. 2007-2008
	3. 2008-2009
	4. 2009-2010
	5. 2010-2011
	6. 2011-2012
	7. 2012-2013
	8. 2013-2014
	9. Have not yet **developed** a formal assessment plan

A2. In which academic year did you last **update** your assessment plan?

X	1. Before 2007-2008
	2. 2007-2008
	3. 2008-2009
	4. 2009-2010
	5. 2010-2011
	6. 2011-2012
	7. 2012-2013
	8. 2013-2014
	9. Have not yet **updated** the assessment plan

A3. Have you developed a curriculum map for this program?

	1. Yes
X	2. No
	3. Don't know

A4. Has the program indicated explicitly where the assessment **of student learning** occurs in the curriculum?

X	1. Yes
	2. No
	3. Don't know

A5. Does the program have any capstone class?

X	1. Yes
	2. No
	3. Don't know

A5.1. If yes, please list the course number for each capstone class: [__110, 125, 133, 141, 164_____]

A6. Does the program have **ANY** capstone project?

X	1. Yes
	2. No
	3. Don't know

A7. Name of the academic unit: [___CHEMISTRY ____]

A8. Department in which the academic unit is located: [_CHEMISTRY__ ____]

A9. Department Chair's Name: [_Linda Roberts_____]

A10. Total number of annual assessment reports submitted by your academic unit for 2013-2014: [_1___**]**

A11. College in which the academic unit is located:

	1. Arts and Letters
	2. Business Administration
	3. Education
	4. Engineering and Computer Science
	5. Health and Human Services
X	6. Natural Science and Mathematics
	7. Social Sciences and Interdisciplinary Studies
	8. Continuing Education (CCE)
	9. Other, specify:

Undergraduate Degree Program(s):

A12. Number of undergraduate degree programs the academic unit has: [___5 ___**]**

A12.1. List all the name(s): [_BS Chemistry, BS Biochemistry, BA Chemistry, BA Chemistry with forensic concentration, BA Chemistry with biochemistry concentration_____]

A12.2. How many concentrations appear on the diploma for this undergraduate program? [___2 ___**]**

Master Degree Program(s):

A13. Number of Master's degree programs the academic unit has: [__2 ___**]**

A13.1. List all the name(s): [_Master's in Chemistry, Master's in Chemistry with Biochemistry concentration_____]

A13.2. How many concentrations appear on the diploma for this master program? [_1_____**]**

Credential Program(s):

A14. Number of credential degree programs the academic unit has: [__0____**]**

A14.1. List all the names: [_____]

Doctorate Program(s)

A15. Number of doctorate degree programs the academic unit has: [____**0**_____**]**

A15.1. List the name(s): [_____]

A16. Would this assessment report apply to other program(s) and/or diploma concentration(s) in your academic unit*?

X	1. Yes
	2. No

*If the assessment conducted for this program (including the PLO(s), the criteria and standards of performance/expectations you established, the data you collected and analyzed, the conclusions of the assessment) is the same as the assessment conducted for other programs within the academic unit, you only need to submit one assessment report.

16.1. If yes, please specify the name of each program: __We use the same assessment for all five undergraduate degrees. _____
16.2. If yes, please specify the name of each diploma concentration: __see A12.1_____