NOTE TO CAPR REVIEWER:
Read the Annual Report submitted by the program by visiting the Five-year Reviews and Annual Reports by Department page on the Academic Senate website; find the CAPR document that pertains to the last five year review (e.g. 08-09 CAPR 42). Read this document and identify the main issues raised by CAPR with respect to the five-year plan and the goals set for this project in the intervening five years to the next program review. Report back on the program and the degree to which the Annual Report a) addresses the five year planning horizon as appropriate, and b) addresses the specific elements as parsed out below (questions 1-4).

YEAR: 2013-2014

PROGRAM: Chemistry and Biochemistry

LAST FIVE-YEAR REVIEW: 2008-2013

NEXT FIVE-YEAR REVIEW: 2013-2018

CAPR REVIEW AND RECOMMENDATION DOCUMENT: The 5-year review met the criteria and assessment data required needed for a strong program. CAPR recommends acceptance, without modification, of the Dept. of Chemistry and Biochemistry's 5-year review. (Acceptance by CAPR committee was affirmed and is now on its way to the Academic Senate)

(i.e. 13-14 CAPR 22 on Five-year Reviews and Annual Reports by Department webpage)

1. Does the Annual Report have a self-study (one page)?
   Yes X No □

1a. Does the Annual Report record progress with departmental planning and review? – does it describe progress toward the program’s defined goals, any problems reaching its goals, any revisions to goals, and any new initiatives taken with respect to goals?
   Yes X No □

Yes, under Section B of the 2013-14 report, the Department has made adequate progress toward reaching their stated goals. A revamping of the Introduction to Chemistry Course (Chem. XXX) has been carried out by Dr. Danika le Duc to better align the chemical information needed so that the lecture and the lab are more aligned with one another. The Dept. has hired two more Faculty and therefore, can offer required courses, such as Advanced Inorganic Chemistry (Chem4161 and 4162), which prior to the new hires was only offered every other year. This course is a much-needed course as it is a requirement for the B.S. Chemistry Degree. Still in development is the Activities in Chemistry Course (Chem. 4400), which is an elective course that would be added to the B.A. in Chemistry and Biochemistry and the B.S. Chemistry curricula. After discussion with the Departmental Chair, the course will be developed within the upcoming year.

All programs that were above the CSU Board of Trustees, Section V requirement, in which all undergraduate degree programs be less than 180 units have been modified and all degree paths are now in compliance with Section V.
By offering Advanced Topic in Chemistry courses (Chem. 6310, 6410 and 6510) several times during the academic year the Department has been able to increase the number of 6000 levels courses taken by graduate students. Recently hired faculty will be increasing the number of 6000-level courses as they are currently developing new courses, which will be sent to the College of Science Curricular Committee in the upcoming academic year.

Due to the availability of A2E2 funds the Department has updated old and broken equipment used in both teaching and research labs. They have maintained their NMR and added a spectrofluorimter, a microplate spectrometer and nano-drop spectrometers to their Department. This is a major benefit to students, who will be using these types of equipment in the workforce and in graduate programs.

Most importantly, the Department has concluded two successful searches for tenure track positions for a new Biochemist (Dr. Marlin Malim) and an Inorganic Chemist (Dr. Patrick Huang). However, due to the large number of options within the Department’s curricula, there is a large shortage of faculty to teach a number of the courses. As a consequence the Department has to hire a large proportion of lectures to fulfill the teaching requirements.

1b. Does the Annual Report provide information on the program’s assessment processes? – does it provide information indicating the results of the program’s assessment efforts and/or efforts to further develop its assessment efforts?

Yes X No □

1c. Does the Annual Report detail progress on fulfilling programmatic needs? – does it record significant events which have occurred or are imminent, such as changes to resources, retirements, new hires, curricular changes, honors received, etc?

Yes X No □

The Department's annual report has done an excellent job of providing the Department’s process and data assessment. SLO’s for both the undergraduate and graduate programs were included in the report and are in line with both the College of Science and Universities goal toward providing excellent educational opportunities and requisite knowledge and skills that will be need for chemical positions in industry and government, as well as prepare students who wish to pursue advanced degrees in such fields as medicine or pharmacy.

2. Does the Annual Report have a summary of assessment results and ensuing or necessary revisions (one page)?

Yes X No □

Please identify whether the following information is identifiable:

Which student learning outcome was assessed:
Yes X No □

What assessment instrument(s) were used to measure this SLO:
Yes X No □

What participants were sampled to assess this SLO:
Yes X No □

What assessment results were obtained, highlighting important findings from the data collected:
Yes X No □

How the assessment results were (or will be) used as well as any revisions to the assessment process the results suggests are needed:
2a. Does the Annual Report contain a reflection upon progress made and changes with respect to the student learning outcomes assessment plan that is reported on in the five-year review self-study?

Yes [X] No [ ]

Key Points: For example, the annual report contains assessment data in which Embedded Exam Questions were created and added to midterm and final exams for two Biochemistry courses, which are taken consecutively, fall and winter, respectively. Assessment of Chemistry SLO-1 for Biochemistry Chem. 4411 (Biochemistry I; Protein Chemistry) and Chem. 4412 (Biochemistry II; Metabolic Biochemistry). Breakdown of correct answers are given for specific topics and whether the students are being assessed for Chemistry Majors or Biochemistry Majors. This type of assessment was done for several courses in various options (See Appendix A).

2b. Does the Annual Report describe any changes made to the assessment plan in the preceding 12 months, summarize activities carried out to implement the assessment plan by the program in the preceding 12 months, and summarize the results of any SLO assessed in the preceding 12 months?

Yes [ ] No [X]

Key Points: No, the Department does not outline changes from the past 12 months or how they plan to assess differently in the upcoming 12 months. However, this is not a major concern for this Department as their current assessment plan is extensive, comprehensive and detailed that it does not need improving at this time.

3. Does the Annual Report have numeric data summaries of the program obtained from Planning and Institutional Research (one page)?

Yes [X] No [ ]

Does the Annual Report numeric data summary include:

3a. Student demographics of majors?
   Yes [X] No [ ]

3b. Student level of majors?
   Yes [X] No [ ]

3c. Faculty and academic allocation?
   Yes [X] No [ ]

3d. Course data?
   Yes [X] No [ ]

3e. One or two pages of supplemental information, as appendices, in the form of graphical presentation (e.g., line graphs), tables, and pertinent discussion which summarize the data of the last several (3-5) years to make changes and trends more apparent (note, this is suggested i.e. optional)? Yes [X] No [ ]

4. In addition to the required elements of the Annual Report (1-3 above), does the Annual Report include any elements that were not requested?

Yes [X] No [ ]

Comments: Yes, the Department also includes their summary assessment of their PSLO and PLO's, which is line with the PSLO and PLO's of the past five-year review, which is currently being sent to the Academic Senate.