1. **Name(s) and Number(s) of Course being assessed for Oral Communication:**
   BIOL 4950 Undergraduate Seminar (11/2/12 Per Vince Camarata - also covers Botany and Marine Biology)

2. **Number of Students enrolled per year AND number of those students whose work was assessed for oral communication (SLO 7) competency:**
   51 AND 30

3. **Assessment Method(s): Explain how assessment for this SLO - not grading for the course as a whole - was conducted. You may cut/paste rubrics for inclusion here, identify faculty reviewing committees, or identify specific kinds of test questions important to your method.**
   BIOL 4950 is taught by various members of the faculty. We have developed a series of rubrics for evaluating the various communication and critical thinking skills the course is designed to cover. Faculty members met to review and discuss student performances based on analysis of the rubrics by each faculty member. The emphasis of the discussion is on 1) identifying areas of strengths and weaknesses in student performance, and 2) developing strategies for improved pedagogy.

4. **If the Assessment methods differ from those initially proposed to the CCGEC, identify the differences and explain the rationale for those changes:**
   We adopted BIOL 4950 as our oral communications requirement before the university SLOs were adopted. We have not ever been asked to submit our assessment methods.

5. **Findings: (what add assessment data tell you about student proficiency in this outcome?)**
   A review of the results from the rubric data and discussion identified the following:
   1. Student presentations are generally good. The faculty felt that presentation performance most likely reflects increasing opportunities for student oral presentations in several BIOL courses.
   2. One persistent weakness is students’ ability to interpret and adequately present visual representations such as graphs and tables from journal articles in presentations. This pattern is thought to be a general weakness of student understanding of complex data representation, rather than a general weakness in oral presentation skills. In particular, students appear to see visual data as just another way of presenting the information (i.e., in addition to the text) rather than the primary basis for the article.
   3. Another concern that comes out of review of the participation rubric data is weakness in students’ ability to communicate scientific ideas with precision, and to demonstrate confidence with scientific language and genres. This pattern is reflected in common use of colloquial analogies rather than scientific nomenclature. The analogies usually are apt and demonstrate good understanding, but we feel this reflects lack of confidence with use of scientific discourse.

6. **How did you (or will you) use the findings for improvement? (What questions/issues/concerns did your data raise for the faculty teaching the course? What discussion did the faculty have about the findings? What future actions to improve student attainment of this outcome will the department / program take as a result of this analysis?)**
   In response to our discussion of the data and observations, we will try the following adjustments in certain sections of the course as a pilot to see if the above issues can be addressed.
1. To improve student proficiency in evaluating visual data, we will develop a new module in place of the current annotated bibliography. This new module will include an assignment given early in the term in which students will be asked to evaluate several forms of visual data, including figures, tables, and graphs. Evaluations will then be discussed as a group in class with the instructor providing prompts on critical analysis of results. Individual skills will be assessed in each student’s presentation and there will be a final assignment where students will evaluate similar visual data.

2. Adjust the participation rubric to give greater emphasis to use of scientific language in discussion. In moderating the class discussions, instructors also will follow up on inexact language or use of analogies to encourage students to express themselves with appropriate language.

7. Additional Comments: (What else would you like the Committee to know about your assessment of this course or plans for the future?)

8. Committee Comments

3.5/4- I thought they did a nice job