Assessment Date: 8/29/13

Faculty Name(s): Angelique Finney

1. Course Name and Number:
   Biology 106

2. All Course SLOs from the Course Outline of Record:

   **Student Learning Outcomes**
   
   1. Identify the significance of microbes in their lives.
   2. Compare and contrast anatomical and physiological differences between prokaryotic and eukaryotic cells.
   3. Describe the manner in which microbes grow and methods of controlling their growth.
   4. Differentiate aspects of our immune system and relate how diseases of the immune system occur.
   5. Interpret advances in recombinant gene technology.
   6. Demonstrate competency in antiseptic techniques.
   7. Perform basic microbiological laboratory procedures and common diagnostic staining techniques.
   8. Investigate and identify an unknown bacterial culture and define it biochemically and morphologically.

3. Specific Course SLO(s) assessed as part of this project:

   6. Demonstrate competency in antiseptic techniques.
   7. Perform basic microbiological laboratory procedures and common diagnostic staining techniques.

4. Assessment strategy or tool used in the assessment. (Describe below, and if applicable copy/paste any additional related documents at end of this form (i.e. Rubric, score sheet, test questions, essay assignment, etc.):

   **SLO 6:** Student skills and improvement of their skills at using aseptic techniques were assessed midway through the semester, and again near the end of the semester, via two practical exams given to students during the laboratory.

   **SLO 7:** Assessment of students ability to successfully complete common diagnostic staining techniques were assessed by instructor observation of student staining techniques (simple stains, endospore stains, capsule stains, and gram stains) throughout the semester.
5. Specific aspects of the assessment tool which link up to specific Course SLOs being assessed (i.e. Which specific test questions measured which Course SLOs? Note: May describe with #4 above):

See #4 above

6. Results and analysis of the data. (Explain below and if applicable copy/paste any related documents, i.e. spreadsheets with data at the end of this document):

| SLO 6: Aseptic technique practical exam 1: 35 of 38 students received a 100%; 3 of 38 students received an 85%. Aseptic technique practical exam 2: 36 of 38 students received a 100%; 2 of 38 students received a 90%. Overall the students scores show that having variable point values (point values that increase from the first practical to the second practical) probably don’t influence whether students take more time to learn the correct procedure since only one student appeared to improve between the two practicals (this will be assessed again during fall 2013, see #8 below). The scores also show that the current teaching strategies for aseptic technique appear to be successful since 92% of students initially received 100% and 95% of students received a 100% on the second practical.

SLO 7: Instructor observation of student staining techniques indicated that the majority of students (95%) were able to successfully complete the staining procedures with little instructor help by their third attempt at the staining technique. Of 38 students only 2 students (approximately 5% of students) were unable to complete the simple stain independently the third time students performed the stain. |

7. Describe any faculty dialogue that occurred as part of the assessment process (i.e. Were results shared at a department meeting? Was there discussion about changing any SLOs? Etc.):

Dr. Kauffman and I discussed changing the point value of the practicals so that the first practical for assessing student aseptic technique skills was worth fewer points than the second practical used to assess student aseptic technique skills. We felt that this might be more likely to encourage students to learn where they are making errors in their technique if they realized the next practical was worth more points. For Spring 2013 we did change the point values so that the practicals increased in value throughout the semester.

8. Next steps (i.e. any planned revisions to curriculum or teaching strategies to promote student success, future assessment plans, etc.):

| SLO 6: This SLO will be assessed again during the fall 2013 semester. The variable point values for the practicals (point value increasing between the first and second practicals) will be left as it is so that it can be determined if having this variable point value really does not influence whether students take more time to learn the correct procedure.

SLO 7: There are no plans at this time to change the strategies used in lab to instruct staining techniques. Current strategies appear to be successful. |

9. Results of implemented changes, if available at this time:

Please save your finished document in the following format:

yyyysemester-sloa-courseid.doc
example: 2012fall-sloa-engl101c.doc