SAINT LOUIS UNIVERSITY.

Program-Level Assessment: *Annual Report*

Program(s): Medical Laboratory Science

Department: Clinical Health Sciences

College/School: Doisy College of Health Sciences

Date: 9/25/18

Primary Assessment Contact: Amanda Reed, M.A.E., MLS(ASCP)^{CM}

1. Which program student learning outcomes were assessed in this annual assessment cycle?

PLO #2: Students will communicate accurate laboratory information to members of the healthcare team.

PLO #4: Students will demonstrate the application of laboratory principles.

2. What data/artifacts of student learning were collected for each assessed outcome? Were Madrid student artifacts included?

PLO #2: **MLS 4550** Medical Bacteriology Laboratory report forms and **MLS-4780** Clinical Microbiology Practicum / Professional Development Evaluations.

PLO #4: **MLS 4740** Clinical Hematology Practical Evaluations.

No Madrid student artifacts were included.

3. How did you analyze the assessment data? What was the process? Who was involved?
NOTE: If you used rubrics as part of your analysis, please include them in an appendix.

See Appendix for the Rubric included.

PLO #2: Course instructors and clinical preceptors evaluated the artifacts for MLS 4550 and MLS 4780, reported the results to the program director who assessed that the outcomes were met according the rubric.

PLO #4: The clinical preceptors evaluated the artifacts for MLS 4740, and reported the results to the program director who assessed that the outcomes were met according the rubric.

4. What did you learn from the data? Summarize the major findings of your analysis for each assessed outcome.
NOTE: If necessary, include any tables, charts, or graphs in an appendix.

PLO #2: An average of ***85%*** of students achieved a ranking of *"introduce" or higher* in MLS 4550 using corresponding assessment rubric. Students were able to prepare laboratory reports using established laboratory protocols with minimal error as a result of evaluating isolated organism information. 100% of students ranked at the "reinforce" level or higher for MLS 4780.

PLO #4: An average of **85%** of students achieved a ranking of *"mastery"* using corresponding rubric.

5. How did your analysis inform meaningful change? How did you *use the analyzed data to make or implement recommendations for change* in pedagogy, curriculum design, or your assessment plan?

PLO #2: For MLS 4550, we are revising the Bacteriology Laboratory reporting protocols in the lab manual so that they are in a summarized chart and organized by specimen type rather than included as part of a discussion at the beginning of class. We are not making changes to the MLS 4780.

PLO #4: No change needed. 100% of the MLS students achieved "mastery" using the corresponding rubric. We will continue to stress the importance of evaluates pre-analytical, analytical, and post-analytical laboratory processes alongside the patient's reported physiologic condition to assess the reliability of test results.

6. Did you follow up ("close the loop") on past assessment work? If so, what did you learn? *(For example, has that curriculum change you made two years ago manifested in improved student learning today, as evidenced in your recent assessment data and analysis?)*

This is the first year we have implemented these PLOs. Therefore, we need to complete another assessment cycle before we can follow up and make changes if needed.

IMPORTANT: Please submit any revised/updated assessment plans to the University Assessment Coordinator along with this report.

Appendix

MEDICAL LABORATORY SCIENCE (MLS)		
Program Learning Outcome (PLO #2): Students will communicate accurate laboratory information to members of the healthcare team.		
Introduce**	**Reinforce****	**Master****
• Documents the following data for **EACH** isolated organism with minimal error: ○ Colony morphology on agar ○ Stain results of isolated microbe ○ Selective and differential media reactions. ○ Biochemical tests performed and their reactions.	• Evaluate the above information to prepare preliminary and final reports using established laboratory protocols with minimal error.	• Assess panic values and correctly notifies appropriate personnel with documentation.

****IMPORTANT NOTES:** The ratings, identified by the column headings, are of increasing complexity moving across the table (from left to right). Students who can interpret information presented in laboratory-based case study problems (that is, meet the "reinforce" rating) must be able to first identify the problem (the "introduce" rating). Likewise, in order for students to propose solutions (the "master" rating), they must identify the problem (introduce) and interpret pertinent information ("reinforce" rating).

MEDICAL LABORATORY SCIENCE (MLS)		
Program Learning Outcome (PLO #4): Students will demonstrate the application of laboratory principles.		
Introduce**	**Reinforce****	**Master****
• Follows workflow protocol utilizing procedures/operating manuals and/or verbal directions from the instructor.	• Interprets laboratory results.	• Evaluates pre-analytical, analytical, and post-analytical laboratory processes alongside the patient's reported physiologic condition to assess the reliability of test results.

****IMPORTANT NOTES:** The ratings, identified by the column headings, are of increasing complexity moving across the table (from left to right). Students who can interpret information presented in laboratory-based case study problems (that is, meet the "reinforce" rating) must be able to first identify the problem (the "introduce" rating). Likewise, in order for students to propose solutions (the "master" rating), they must identify the problem (introduce) and interpret pertinent information ("reinforce" rating)