Doisy College of Health Sciences Program-Level Assessment Plan

SAINT LOUIS UNIVERSITY.

Program: Medical Laboratory Science	Degree Level (e.g., UG or GR certificate, UG major, master's program, doctoral program): UG
Department: Clinical Health Sciences	College/School: **Doisy College of Health Sciences**
Date (Month/Year): 08/2021	Primary Assessment Contact: amanda.reed@health.slu.edi

Note: Each cell in the table below will expand as needed to accommodate your responses.

#	**Student Learning Outcomes** What do the program faculty expect all students to know or be able to do as a result of completing this program? Note: These should be measurable and manageable in number (typically 4-6 are sufficient).	**Curriculum Mapping** In which courses will faculty intentionally work to foster some level of student development toward achievement of the outcome? Please clarify the level (e.g., introduced, developed, reinforced, achieved, etc.) at which student development is expected in each course.	**Program Target**	**Assessment Methods** **Student Artifacts (What)** 1. Which student artifacts will be used to determine if students have achieved this outcome? 2. In which courses will these artifacts be collected?	**Assessment Methods** **Evaluation Process (How)** 1. What process will be used to evaluate the student artifacts, and by whom? 2. What tools(s) (e.g., a rubric) will be used in the process? Note: Please include any rubrics as part of the submitted plan documents.	**Use of Assessment Data** 1. How and when will analyzed data be used by faculty to make changes in pedagogy, curriculum design, and/or assessment work? 2. How and when will the program evaluate the impact of assessment-informed changes made in previous years?	**Timeline** (any 12-month period is acceptable) Example: *Academic years ending in an odd number*
1	Students will demonstrate respect for human life with regard to all aspects of laboratory testing.	**-1-MLS 4520** Medical Bacteriology	**-1-** An average of ***85%*** of students will achieve a ranking of *"introduce" or higher*	**-1-** Microbiology Ethics Case Study Assignment MLS 4520 Medical Bacteriology	-1- Data Collection/ Course Instructor Data Analysis/ MLS Program Director Using corresponding rubric	1. Program faculty members review and discuss the results and findings of each assessment cycle early in September in a dedicated assessment review meeting. Action items are identified as appropriate.	-1- Every academic year that ends in an *odd* number

						The appropriate faculty members associated with each action item examine it further in the context of the associated courses(s) and/or the overall program. This process may include review of various documents (i.e. review of course evaluations and/or other course-related documents). When the action item and contextual review align and change is deemed warranted, it is implemented accordingly. When these two items only partially align or if they do not align, the faculty determine if the action item should be implemented	-2- Every academic year that ends in an *odd* number
		-2- MLS 4780 Clinical Microbiology Practicum	**-2-** An average of **85%** of students will achieve a ranking of *"mastery"*	**-2-**Professional Development Evaluation MLS 4780 Clinical Microbiology Practicum	-2- Data Collection/ Clinical Preceptors Data Analysis/ MLS Program Director Using corresponding rubric	2. Changes made the previous year will also be assessed and discussed by the Program Director and program faculty at the fall Program meeting.	
2	Students will communicate accurate laboratory information to members of the healthcare team.	**-1- MLS 4550** Medical Bacteriology	1- An average of ***85%*** of students will achieve a ranking of *"introduce" or higher*	-1-Final Unknown Laboratory report form MLS 4550 Medical Bacteriology	-1- Data Collection/ Course Instructor Data Analysis/ MLS Program Director Using corresponding assessment rubric.	See Above	-1- Every academic year that ends in an *even* number.
		-2- MLS-4800 Clinical Microbiology Practicum	-2- An average of **85%** of students will achieve a ranking of *"mastery"*	-2-Work Skills Evaluation MLS-4800 Clinical Microbiology Practicum	-2-Data Collection/ Clinical Preceptors Data Analysis/ MLS Program Director		-2- Every academic year that ends in an *even* number

					Using corresponding rubric		
3	Students will apply critical reasoning to solve laboratory-based case studies.	**-1-MLS 3150** Urinalysis & Immunology Lab **-2- MLS 4611** Advanced topics and Case Correlations	-1- An average of ***85%*** of students will achieve a ranking of *"introduce" or higher*. -2- An average of **85%** of students will achieve a ranking of *"mastery"*	-1- Urinalysis case study assignment MLS 3150 Urinalysis & Immunology Lab -2- Observations of case study presentations MLS 4611 Advanced topics and Case Correlations	-1- Data Collection/ Course Instructor Data Analysis/ MLS Program Director Using corresponding assessment rubric -2- Data Collection/ Course Instructor Data Analysis/ MLS Program Director Using corresponding rubric	See above	-1- Every academic year that ends in an *odd* number -2- Every academic year that ends in an *odd* number
4	Students will integrate knowledge of laboratory theory into practice	**-1- BLS 1150** Foundations of Medical Laboratory Science Laboratory **-2- MLS 4740** Clinical Hematology	-1- An average of ***85%*** of students will achieve a ranking of *"introduce" or higher* -2- An average of **85%** of students will achieve a ranking of *"mastery"*	-1- Hematology Laboratory exercise. BLS 1150 Foundations of Medical Laboratory Science Laboratory -2-Clinical Hematology Work Skills Evaluation. MLS 4740 Clinical Hematology	-1- Data Collection/ Course Instructor Data Analysis/ MLS Program Director Using corresponding assessment rubric. -2- Data Collection/ Clinical Preceptors Data Analysis/ MLS Program Director Using corresponding rubric	See above	-1- Every academic year that ends in an *even* number -2- Every academic year that ends in an *even* number
5	Students will adhere to the principles found in the American Society for Clinical Laboratory Science (ASCLS) Professional Code of Ethics	**-1- MLS 4350** Immunohematology Lab	-1- An average of ***85%*** of students will achieve a ranking of *"introduce" or higher*	-1- Immunohematology ethics case study assignment MLS 4350 Immunohematology Lab	-1- Data Collection/ Course Instructor Data Analysis/ MLS Program Director Using corresponding assessment rubric.	See above	-1- Every academic year that ends in an *odd* number

		-2- MLS 4800 Clinical Immunohematology Practicum	-2- An average of **85%** of students will achieve a ranking of *"mastery"*	-2- Professional Development Evaluation MLS 4800 Clinical Immunohematology Practicum	-2- Data Collection/ Clinical Preceptors Data Analysis/ MLS Program Director Using corresponding rubric		-2- Every academic year that ends in an *odd* number

Additional Questions

1. On what schedule/cycle will faculty assess each of the program's student learning outcomes? (Note: It is not recommended to try to assess every outcome every year.)

   See table above.

2. Describe how, and the extent to which, program faculty contributed to the development of this plan.

   All faculty who teach BLS or MLS courses were shown this plan and asked for their feedback during Program meetings; and provide the data to the program director for use in creating the report.

IMPORTANT: Please remember to submit any rubrics or other assessment tools along with this plan.

Program Assessment Rubric

MEDICAL LABORATORY SCIENCE (MLS)		
Program Learning Outcome (PLO #1): Students will demonstrate respect for human life with regard to all aspects of laboratory testing.		
Introduce**	**Reinforce****	**Master****
• Student is not performing as would be expected of an entry level MLS.	• Student is currently performing as an entry level MLS to varying degrees.	• Student's performance is well above what would be expected of an entry level MLS.

****IMPORTANT NOTES:** The ratings, identified by the column headings, are of increasing complexity moving across the table (from left to right). Students who meet the "reinforce" criteria must be able to first meet the "introduce" criteria. Likewise, students who meet the "master" criteria must also meet the "introduce" and "reinforce" criteria.

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 work-ups and decisions clearly, legibly, and concisely per the institution's procedures	• 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 meet the "reinforce" criteria must be able to first meet the "introduce" criteria. Likewise, students who meet the "master" criteria must also meet the "introduce" and "reinforce" criteria.

MEDICAL LABORATORY SCIENCE (MLS)		
Program Learning Outcome (PLO #3): Students will apply critical reasoning to solve laboratory-based case studies.		
Introduce**	**Reinforce****	**Master****
• Recognizes normal from abnormal results.	• Chooses appropriate next steps in each case.	• Proposes solutions to laboratory-based case study problems with justification.

****IMPORTANT NOTES:** The ratings, identified by the column headings, are of increasing complexity moving across the table (from left to right). Students who meet the "reinforce" criteria must be able to first meet the "introduce" criteria. Likewise, students who meet the "master" criteria must also meet the "introduce" and "reinforce" criteria.

MEDICAL LABORATORY SCIENCE (MLS)		
Program Learning Outcome (PLO #4): Students will integrate knowledge of laboratory theory into practice.		
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 meet the "reinforce" criteria must be able to first meet the "introduce" criteria. Likewise, students who meet the "master" criteria must also meet the "introduce" and "reinforce" criteria.

MEDICAL LABORATORY SCIENCE (MLS)		
Program Learning Outcome (PLO #5): Students will adhere to the principles found in the American Society for Clinical Laboratory Science (ASCLS) Professional Code of Ethics		
Introduce**	**Reinforce****	**Master****
• Identifies central ethical issues and uses them as a basis for ethical evaluation.	• Formulates an implementation plan that delineates the execution of the decision	• Formulates an implementation plan that delineates the execution of the decision and that evidences a thoughtful reflection on the benefits and risks of action.

****IMPORTANT NOTES:** The ratings, identified by the column headings, are of increasing complexity moving across the table (from left to right). Students who meet the "reinforce" criteria must be able to first meet the "introduce" criteria. Likewise, students who meet the "master" criteria must also meet the "introduce" and "reinforce" criteria.