## **Doisy College of Health Sciences Program-Level Assessment Plan**



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): 09/2023 Primary Assessment Contact: amanda.reed@health.slu.edu

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

#	Student Learning	Curriculum Mapping	Program Target	Assessmen	Methods	Use of Assessment Data	Timeline
	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).	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.		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?	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.	<ol> <li>How and when will analyzed data be used by faculty to make changes in pedagogy, curriculum design, and/or assessment work?</li> <li>How and when will the program evaluate the impact of assessment-informed changes made in previous years?</li> </ol>	(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-BLS 1000 Power of Laboratory Medicine	-1- An average of 85% of students will achieve a ranking of "introduce" or higher	-1- Ethics, mission, and professionalism reflection paper BLS 1000 Power of Laboratory Medicine	-1- Data Collection/ Course Instructor  Data Analysis/ MLS Program Director Using corresponding rubric	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 <i>odd</i> 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	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. Changes made the previous year will also be assessed and discussed by the Program Director and program faculty at the fall Program meeting.	-2- Every academic year that ends in an odd number
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	-2-Work Skills Evaluation MLS-4800 Clinical Microbiology Practicum	-2-Data Collection/ Clinical Preceptors Data Analysis/ MLS		-2- Every academic year that ends in an

			"mastery"		Program Director Using corresponding rubric		even number
3	Students will apply critical reasoning to solve laboratory-based case studies.	-1- BLS 1150 Foundations of Medical Laboratory Science Lab	-1- An average of <b>85%</b> of students will achieve a ranking of "introduce" or higher.	-1- Urinalysis case study assignment BLS 1150 Foundations of Medical Laboratory Science 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 4611 Advanced topics and Case Correlations	-2- An average of <b>85%</b> of students will achieve a ranking of "mastery"	-2- Observations of case study presentations MLS 4611 Advanced topics and Case Correlations	-2- Data Collection/ Course Instructor  Data Analysis/ MLS Program Director Using corresponding rubric		-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	-1- An average of <b>85%</b> of students will achieve a ranking of "introduce" or higher	-1- Hematology Laboratory exercise BLS 1150 Foundations of Medical Laboratory Science 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 even number
		-2- MLS 4740 Clinical Hematology	-2- An average of 85% of students will achieve a ranking of "mastery"	-2-Clinical Hematology Work Skills Evaluation. MLS 4740 Clinical Hematology	-2- Data Collection/ Clinical Preceptors  Data Analysis/ MLS Program Director Using corresponding rubric		-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	-1- BLS 1000 Power of Laboratory Medicine	-1- An average of 85% of students will achieve a ranking of "introduce" or higher	-1- Immunohematology ethics case study assignment BLS 1000 Power of Laboratory Medicine	-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

of Ethics					
	-2- MLS 4820	-2- An average of	-2- Ethical Reflection	-2- Data Collection/	-2- Every
	Clinical Urinalysis	85% of students	Paper	Clinical Preceptors	academic year
	Practicum	will achieve a	MLS 4820 Clinical		that ends in an
		ranking of	Urinalysis Practicum	Data Analysis/ MLS	<i>odd</i> number
		"mastery"		Program Director	
				Using corresponding	
				rubric	

### **Additional Questions**

1. On what schedule/cycle will faculty assess each of the program's student learning outcomes? (Note: It is <u>not recommended</u> 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.

the patient, colleagues & profession, and

society.

institution's procedures

### **Program Assessment Rubric**

## Program Learning Outcome (PLO #1): Students will demonstrate respect for human life with regard to all aspects of laboratory testing. Introduce\*\* Reinforce\*\* Master\*\* • Student can summarize the MLS's duty to • The student can analyze the MLS's duty • Student can model the MLS's duty to the

to the patient, colleagues & profession,

and society using laboratory based

# 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 Program Learning Outcome (PLO #2): Students will communicate accurate laboratory information to members of the healthcare healthcare \*\*Outcome (PLO #2): Students will communicate accurate laboratory information to members of the healthcare \*\*Description\* \*\*Outcome (PLO #2): Students will communicate accurate laboratory information to members of the healthcare \*\*Description\* \*\*Outcome (PLO #2): Students will communicate accurate laboratory information to members of the healthcare \*\*Description\* \*\*

using established laboratory protocols

with minimal error.

patient, colleagues & profession, and

society.

documentation.

ethical case studies/scenarios.

\*\*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.

<sup>\*\*</sup>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**	Introduce** Reinforce** Master**				
Recognizes normal from abnormal results.	Relate abnormal results to possible disease states.	Proposes additional lab tests to confirm the diagnosis.			

<sup>\*\*</sup>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): Stu	udents will integrate knowledge of labor	ratory theory into practice.
Introduce**	Reinforce**	Master**
<ul> <li>Follows workflow protocol utilizing procedures/operating manuals and/or verbal directions from the instructor.</li> </ul>	Interprets laboratory results.	<ul> <li>Evaluates pre-analytical, analytical, and post-analytical laboratory processes alongside the patient's reported physiologic condition to assess the reliability of test results.</li> </ul>

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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**						
Identifies central ethical issues and uses them as a basis for ethical evaluation.	Formulates an implementation plan that delineates the execution of the decision	<ul> <li>Formulates an implementation plan that delineates the execution of the decision and that evidences a thoughtful reflection on the benefits and risks of</li> </ul>				

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action.