

Doisy College of Health Sciences Program-Level Assessment Plan

Program: Investigative and Medical Science (IMS)	Degree Level (e.g., UG or GR certificate, UG major, master’s program, doctoral program): UG
Department: Clinical Health Sciences (CHS)	College/School: Doisy College of Health Sciences
Date (Month/Year): 12/07/2017; Revised 10/08/2019;	Primary Assessment Contact: Minh Kosfeld, PhD, MLT(ASCP) ^{CM}
Revised 09/21/2020; Revised 08/15/2021	

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		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) <u>Example:</u> <i>Academic years ending in an odd number</i>
				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 tool(s) (e.g., a rubric) will be used in the process? Note: Please include any rubrics as part of the submitted plan documents.		
1	Students will demonstrate the Jesuit value of “Women & Men for and with Others” to promote service in the medical sciences.	<p>1. BLS 1100 Foundations of Medical Laboratory Science / Introduce</p> <p>2. BLS 4411 Fundamentals of</p>	<p>1. An average of 85% of students will achieve the ranking of “introduce” or higher.</p> <p>2. An average of 85% of</p>	<p>1. A reflection paper describing volunteer service / BLS 1100 Foundations of Medical Laboratory Science</p> <p>2. A reflection paper describing the value</p>	<p>1. Data Collection and Analysis / IMS Program Director Using corresponding assessment rubric.</p> <p>2. Data Collection/ Course Instructor</p>	<p>1. At the end of each assessment cycle, the program faculty members will view the analyzed data with the program director to determine if changes in their assessment work are warrant. If so, the faculty members will</p>	<p>Every academic year that ends with an odd number.</p>

		Immunology / Reinforce	students will achieve the ranking of "reinforce" or higher.	of volunteer service / BLS 4411 Fundamentals of Immunology	Data Analysis/ IMS Program Director Using corresponding assessment rubric.	provide input about the changes to ensure that it is appropriate and meaningful for both the associated courses(s) and the overall program.	
2	Students will deliver a clear description of a medical sciences project.	<p>1. BLS 1100 Foundation of Medical Laboratory Science / Introduce</p> <p>2. BLS 4610 Research Design, Critique & Presentation / Reinforce</p>	<p>1. An average of 85% of students will achieve the ranking of "introduce" or higher.</p> <p>2. An average of 85% of students will achieve the ranking of "reinforce" or higher.</p>	<p>1. Student presenting an Urinalysis case / BLS 1100 Foundation of Medical Laboratory Science</p> <p>2. An oral presentation describing a research project / BLS 4610 Research Design, Critique & Presentation</p>	<p>1. Data Collection and Analysis/ IMS Program Director Using corresponding assessment rubric.</p> <p>2. Data Collection/ Course Instructor</p> <p>Data Analysis/ IMS Program Director Using corresponding assessment rubric.</p>	<p>2. At the end of each assessment cycle, the program director will compare current to earlier student achievement data to determine impact of assessment-informed changes made in previous years.</p>	Every academic year that ends with an even number.
3	Students will critically evaluate data in the medical sciences.	<p>1. BLS 1150 Foundation of Medical Laboratory Science Lab / Introduce</p> <p>2. BLS 4210 Hematology / Reinforce</p>	<p>1. An average of 85% of students will achieve the ranking of "introduce" or higher.</p> <p>2. An average of 85% of students will achieve the ranking of "reinforce" or higher.</p>	<p>1. Identifying and counting different types of blood cells / BLS 1150 Foundation of Medical Laboratory Science Lab</p> <p>2. Evaluating a blood disorder based on blood cell quantity and morphology / BLS 4210 Hematology</p>	<p>1. Data Collection/ Course Instructor</p> <p>Data Analysis/ IMS Program Director Using corresponding assessment rubric.</p> <p>2. Data Collection/ Course Instructor</p> <p>Data Analysis/ IMS Program Director Using corresponding assessment rubric.</p>		Every academic year that ends with an odd number.

4	Students will apply clinical knowledge to interpret medical sciences data to develop a differential diagnosis.	1. BLS 1150 Foundation of Medical Laboratory Science Lab / Introduce 2. BLS 4110 Medical Biochemistry I / Reinforce	1. An average of 85% of students will achieve the ranking of “introduce” or higher. 2. An average of 85% of students will achieve the ranking of “reinforce” or higher.	1. Measuring glucose concentration / BLS 1150 Foundation of Medical Laboratory Science 2. Solving a case study involving Diabetes mellitus / BLS 4110 Medical Biochemistry I	1. Data Collection/ Course Instructor Data Analysis/ IMS Program Director Using corresponding assessment rubric. 2. Data Collection and Analysis/ IMS Program Director Using corresponding assessment rubric.		Every academic year that ends with an odd number.
5	Students will display knowledge of professional and ethical behaviors necessary to work effectively in an interdisciplinary team.	1. BLS 1100 Foundation of Medical Laboratory Science / Introduce 2. BLS 4120 Medical Biochemistry II / Reinforce	1. An average of 85% of students will achieve the ranking of “introduce” or higher. 2. An average of 85% of students will achieve the ranking of “competent” or higher.	1. A reflection paper evaluating professional and ethical behaviors throughout the course / BLS 1100 Foundations of Medical Laboratory Science 2. Examining a case study involving interdisciplinary teamwork / BLS 4120 Medical Biochemistry II	1. Data Collection and Analysis/ IMS Program Director Using corresponding assessment rubric. 2. Data Collection and Analysis/ IMS Program Director Using corresponding assessment rubric.		Every academic year that ends with an even number.

Additional Questions

- 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.
Faculty members assess their program’s student learning outcomes every two years according to the cycle stated in the Assessment Plan
- Describe how, and the extent to which, program faculty contributed to the development of this plan.
The instructor for each course evaluated the students’ skills using the associated rubrics (see Appendix) and submitted the data to the program director at the end of the term. The program director analyzed these data and drafted an assessment report which was reviewed by the faculty member for accuracy, feedback, and approval.

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

Assessment Rubric
12/15/2017 original; revised 10/31/2019 based on data analysis for the 2018-2019 report;
revised 09/21/2020 based on data analysis for the 2019-2020 report

Investigative and Medical Science (IMS)		
Clinical Health Sciences (CHS)		
Program Learning Outcome (PLO #1): Students will demonstrate Jesuit value of “Women & Men for and with Others” to promote service in the medical sciences.		
Introduce Knowledge/Comprehension	Reinforce Application/Analysis	Master Synthesis/Evaluation
<ul style="list-style-type: none"> Interpret the Jesuit value “Men and Women for and with Others.” 	<ul style="list-style-type: none"> Examine the impact of the Jesuit value “Men and Women for and with Others” in their volunteer, shadowing or work experiences. 	<ul style="list-style-type: none"> Propose an action in the performance of healthcare service activities that demonstrates the Jesuit value “Men and Women for and with Others”
Program Learning Outcome (PLO #2): Students will deliver a clear description of a medical sciences project.		
Introduce Knowledge/Comprehension	Reinforce Application/Analysis	Master Synthesis/Evaluation
<ul style="list-style-type: none"> Identify the required elements when presenting a medical science project. 	<ul style="list-style-type: none"> Articulate a critical analysis of a medical science project 	<ul style="list-style-type: none"> Defend the analysis of a medical science project proficiently when questioned
Program Learning Outcome (PLO #3): Students will critically evaluate data in the medical sciences.		
Introduce Knowledge/Comprehension	Reinforce Application/Analysis	Master Synthesis/Evaluation
<ul style="list-style-type: none"> Identifies laboratory data that would be appropriate to diagnose a given condition 	<ul style="list-style-type: none"> Analyze laboratory data for accuracy and applicability to a given clinical condition 	<ul style="list-style-type: none"> Propose the gathering of additional data to further evaluate a given clinical condition.
Program Learning Outcome (PLO #4): Students will apply clinical knowledge to interpret medical sciences data to develop a differential diagnosis.		
Introduce Knowledge/Comprehension	Reinforce Application/Analysis	Master Synthesis/Evaluation
<ul style="list-style-type: none"> Recognize abnormal clinical data. 	<ul style="list-style-type: none"> Determine clinical relevance of the abnormal clinical data. 	<ul style="list-style-type: none"> Accurately diagnose a disease.
Program Learning Outcome (PLO #5): Students will display knowledge of professional and ethical behaviors necessary to work effectively in an interdisciplinary team.		
Introduce	Reinforce	Master
<ul style="list-style-type: none"> Identifies personal and interpersonal skills that promote professional collegiality. 	<ul style="list-style-type: none"> Explaining how effective personal and interpersonal skills promote a healthy team climate. 	<ul style="list-style-type: none"> Propose an action to improve camaraderie and collaboration in interdisciplinary team work.

IMPORTANT NOTES: The ratings, identified by the column headings, are of increasing complexity moving across the table (from left to right). Students who can analyze/apply information presented in Medical Sciences (that is, meet the “reinforce” rating) must first have attained the Medical Science knowledge/comprehension rating (the “introduce” rating). Likewise, for students to propose diagnosis or solutions (the “master” rating), they must have knowledge/comprehension of the medical issue (the “introduce” rating) and apply/analyze pertinent information (the “reinforce” rating).

SUMMARY OF CHANGES (as of 09/21/2020) is based on data analysis for the 2019-2020 assessment report.

- Edited the description of the criteria for the “reinforce” ranking in the rubric for PLO #2 to be more specific.
- Replaced tool #1 for PLO #5 (**ethics case study assignment / BLS 1100 Foundation of Medical Laboratory Science Lab**) with a new tool (**self-recommendation letter for post-graduate school / BLS 1100 Foundation of Medical Laboratory Science Lab**) to better reflect the goal.
- Modify the rubric for PLO #5 to be consistent with the new tool.

SUMMARY OF CHANGES (as of 08/15/2021) is based on feedback from the 2019-2020 assessment report.

- Revised PLO #5 to focus only on professionalism in teamwork.
- Modify the rubric for PLO #5 to be consistent with the new tool.
- Create new assessment tools to evaluate the revised PLO # 5.