

What you Did – The Plan

Section 1 – Program Mission

- **Program Mission & Goals:**

The mission of the Medical Laboratory Science Degree, a Bachelor of Science program, is to educate, train, and graduate **professionally competent** and ethical individuals, committed to life-long learning, and who are prepared to meet current and future workplace challenges in medical laboratory science.

The goals of the Oregon Tech • OHSU MLS program are to:

1. Advance an **innovative** curriculum that meets current and emergent pedagogical and professional development needs of students.
2. Provide learning experiences rich in opportunities that maximize every student's potential to achieve MLS career entry-level competencies.
3. Graduate competent MLS that meet the **workforce needs of Oregon** and underserved regions of the nation.
4. Identify, establish, and maintain partnerships with community medical laboratories that provide exceptional educational experiences.
5. Contribute to the advancement of MLS pedagogy and growth of the profession.

- **Mission Alignment:**

The mission of Oregon Institute of Technology as adopted in 2019 is to:

“offer **innovative, professionally**-focused undergraduate and graduate degree programs in the areas of engineering, **health**, business, technology, and applied arts and sciences. To foster student and graduate success, the university provides a **hands-on**, project-based learning environment and emphasizes innovation, scholarship, and applied research. With a commitment to diversity and leadership development, Oregon Tech offers **statewide** educational opportunities and technical expertise to meet current and emerging needs of Oregonians as well as other national and international constituents.”

The MLS program meets this mission through its end goal of producing competent MLS professionals that serve our health care facilities in and outside of this state. The program uses innovative and **hands-on** curriculum to challenge students to maximize their potential. The profession of MLS meets a workforce need in Oregon, and the affiliates associated with this program are located in both rural and urban areas of multiple states in our region of the United States. Faculty are active contributors to the MLS pedagogy and the profession through their extra curricular work.

- **Changes to the Mission:**

Mission of the MLS program has been unchanged for the last ten years. It is discussed with faculty in preparation for sharing with the MLS Advisory Board annually. This year the meeting of the Annual Advisory Board took place on June 6 2025. It is posted on the program's outward facing assessment website updated March 2025.

Section 2 – Program Student Learning Outcomes

- **Program Educational Objectives (PEO):**

Upon completion of the Oregon Tech • OHSU MLS program, a student will have had the opportunity to acquire the knowledge and skills required to demonstrate professional attributes of a Medical Laboratory Scientist. Successful completion of the program will allow students to pursue career opportunities in various laboratory settings including but not limited to medical, research and development, sales, management and public health.

At the time of graduation, graduates of the MLS program will have the knowledge needed to:

1. Competently perform a full range of testing in the contemporary medical laboratory, encompassing pre-analytical, analytical, and post-analytical components of laboratory services, including immunology, hematology, clinical chemistry, immunohematology, microbiology, molecular, hemostasis, urinalysis, body fluids, parasitology, mycology, virology and other emerging diagnostic venues.
2. Proficiently problem-solve, troubleshoot, and interpret results, and to use statistical approaches when evaluating data.
3. Participate actively in the development, implementation, and evaluation of test methods
4. Take Responsibility for analysis and decision-making.
5. Apply safety and governmental regulations and standards to medical laboratory practice.
6. Act with Professional and ethical conduct, respecting the feelings and needs of others, protecting the confidence of patient information, and never allowing personal concerns and biases to interfere with the welfare of patients.
7. Participate in Interpersonal and interdisciplinary communication interactions with members of healthcare teams, external relations, customer service and patients.
8. Apply knowledge of medical laboratory finance, operations, marketing, human resource management and educational methods.
9. Utilize information technology to effectively and accurately report laboratory-generated information.
10. Apply research design and practice principles to test development and validation.

- **Program Student Learning Outcomes (PSLO)**

Seven measurable program specific learning outcomes have been defined by the program and approved by the MLS Advisory Board, summarizing the skills discussed by the educational objectives of the MLS program. Student performance on these outcomes are measured to provide information for programmatic assessment. These outcomes were last presented to the Advisory Board on June 3, 2025.

Graduates of the MLS program will have demonstrated:

1. **Competency** to perform a full range of testing in the contemporary medical laboratory encompassing pre-analytical, analytical, and post-analytical components of laboratory services, including immunology, hematology, clinical chemistry, immunohematology, microbiology, molecular, hemostasis, urinalysis, body fluids, parasitology, mycology, virology and other emerging diagnostic venues.
2. Proficiency to **problem-solve**, troubleshoot, and interpret results, and to use statistical approaches when evaluating data.
3. Professional and **ethical conduct**, respecting the culture and diversity of individual preference of others, protecting the confidence of patient information, and never allowing personal concerns and biases to interfere with the welfare of patients.
4. Maintaining appropriate composure under **stressful** conditions.
5. **Administrative skills** consistent with philosophies of quality assurance, continuous quality improvement, laboratory education, fiscal resource management.
6. Application of **safety and governmental regulations** and standards as applied to medical laboratory practice.

7. Effective **communication** skills to ensure accurate and appropriate information transfer.

- **Justification** of PSLOs:

The outcomes were chosen to match National Accrediting standards published by NAACLS last revised in May [2025](#) and align with University Institutional Learning outcomes. Outcomes are published on the program's outward facing assessment webpage last updated March 2025.

The following is a table of alignments:

PSLO	ISLO	NAACLS Wording
Competency to perform a full range of testing in the contemporary medical laboratory encompassing pre-analytical, analytical, and post-analytical components of laboratory services, including immunology, hematology, clinical chemistry, immunochemistry, microbiology, molecular, hemostasis, urinalysis, body fluids, parasitology, mycology, virology and other emerging diagnostic venues.	Quantitative Literacy	At entry level, the medical laboratory scientist will possess the entry level competencies necessary to perform the full range of clinical laboratory tests in areas such as Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunochemistry/Transfusion medicine, Microbiology, Urine and Body Fluid Analysis and Laboratory Operations, and other emerging diagnostics, and will play a role in the development and evaluation of test systems and interpretive algorithms.
Proficiency to problem-solve , troubleshoot, and interpret results, and to use statistical approaches when evaluating data.	Inquiry and Analysis	The medical laboratory scientist will have diverse responsibilities in areas of analysis and clinical decision-making .
Professional and ethical conduct, respecting the culture and diversity of individual preference of others, protecting the confidence of patient information, and never allowing personal concerns and biases to interfere with the welfare of patients.	Ethical Reasoning Diverse Perspectives	At entry level, the medical laboratory scientist will Demonstrate professional and ethical behavior along with effective interpersonal communication skills when engaging with various stakeholders .
Maintaining appropriate composure under stressful conditions.		The ability to relate to people, a capacity for calm and reasoned judgment and a demonstration of commitment to the patient are essential qualities.
Administrative skills consistent with philosophies of quality assurance, continuous quality improvement, laboratory education, fiscal resource management.		The program curriculum must include the principles and practices of administration and supervision as applied to medical laboratory science. Educational methodologies and terminology sufficient to train/educate users and providers of laboratory services.
Application of safety and governmental regulations and		At entry level, the MLS must comply with government regulations and

standards as applied to medical laboratory practice.		accreditation standards relevant to the respective discipline and adhere to prescribed protocols for overall laboratory safety, biohazard containment, and waste disposal.
Effective communication skills to ensure accurate and appropriate information transfer	Communication Teamwork	At entry level, the medical laboratory scientist will have skills in communications sufficient to serve the needs of patients, the public and members of the health care team .

Changes to program learning outcomes:

At the summer term assessment meeting of the program on 6/26/2025 the faculty read through the updates to the NAACLS standards and discussed the programmatic outcomes. Faculty recommended no changes to wording of program outcomes. The update to standards in 2025 requires programs to have course work related to interprofessional practice. Program faculty examined the program learning outcomes as written and found interprofessional practice in three places: Professional and Ethical conduct, Stress Management and Effective Communication. Going forward, coursework in interprofessionalism will be used to measure student outcomes in one of these three categories.

The last change made to the MLS Program outcomes added a measure of maintaining composure in stressful circumstances. Given the high level of burnout experienced in the medical field, the faculty continue to value and teach to this outcome.

Course Learning Outcomes (CLO):

The following is a list of the course learning outcomes within the MLS curriculum map for the professional year of the program. Course Learning Outcomes are essential competencies achieved at the end of the course for each subject area and are further aligned to PSLOs and ISLOs. They are not the same as Learning Objectives which cover all material learned through the course and are detailed in the individual course syllabi.

COURSE	Term/ Instructor	PSLO1	PSLO2	PSLO3	PSLO4	PSLO5	PSLO6	PSLO7
University ISLO		Quantitative Literacy	Inquiry and Analysis	Ethical Reasoning and Diversity				Teamwork and Communication
Hematology Series								
MLS442 Hem I	Fall/Dawn	<u>Identify and quantitate</u> blood cells on a peripheral blood smear.	<u>Calculate and interpret</u> values associated with the CBC and other hematology procedures.				<u>Safely</u> perform heme procedures to obtain accurate patient and QC results	Effectively <u>communicate</u> in writing to convey necessary information included in a lab report.
MLS 452Hem II	Winter/Dawn	Accurately <u>perform</u> differentials on Wright's stained peripheral blood smears.	<u>Interpret</u> findings on Wright's stained peripheral blood smears to determine a most likely diagnosis.					
MLS 449 UA	Spring/Caroline	Perform procedures related to the microscopic and chemical examination of urine and obtain accurate results	Interpret and correlate urine chemistry results and urine microscopic results and their relationship to renal disease		Perform a urinalysis in a timely manner	Perform and interpret quality control and quality assurance practices used in the examination of Urine in accordance with governmental regulations		Effectively communicate, written and verbal, laboratory results, urinalysis methodologies and training materials to peers

						and best practices		
MLS 424 Hemostasis	Summer/Dawn	Safely <u>perform</u> hemostasis procedures to get accurate patient and QC results.	<u>Interpret</u> findings case study findings and lab data to determine a most likely diagnosis.					As a <u>team</u> , <u>develop and present</u> a case study
Chemistry Series								
MLS 415 Chem I	Winter/Laurie	Accurately perform chemistry procedures on an analytic method using patient and QC samples.	Determine and apply the appropriate mathematical function to solve problems in the analytical chemistry lab.					
MLS 416 Chem II	Spring/Laurie	Perform precise and accurate analytical procedures utilizing the appropriate analytical methodology.	Perform method comparison study to calculate acceptability of instrument comparison test results.					Effectively communicate and discuss various testing methodologies and testing practices used in the chemistry laboratory
MLS 407 Capstone	Summer/Rachelle		Students will calculate total allowable error to determine if a method should be implemented.			Students will use educational theory to appropriately train their peers on a new procedure.	Students will understand the purpose of each step in the method validation process and be able to link it to compliance standards.	Students will develop appropriate documentation for a method validation process.
Foundations Series								
MLS 432 Found I	Fall/Caroline		Determine and apply the appropriate mathematical functions and statistical approaches to solve problems and evaluate data in the medical laboratory	identify ethical issues within the medical laboratory and apply the ASCLS professional code of ethics to resolve laboratory ethical dilemmas.	demonstrate professionalism as a phlebotomist and perform a venous blood collection suitable for laboratory testing.	perform and interpret quality control and quality assurance practices in the clinical laboratory in accordance with governmental regulations and best practices	comply with governmental safety regulations and perform correct safety procedures in the medical laboratory.	
MLS 462 Found II	Winter/Rachelle		Choose an appropriate statistical analysis for a given research question.	Perform the appropriate steps necessary to apply for a position as a Medical Laboratory Scientist.		Utilizing information regarding testing volume workload, develop a schedule that meets laboratory staffing needs and adheres to legal employment standards.	Identify Compliance Regulations that are met by specific laboratory activities	Convey appropriate information in a Standard Operating Procedure (SOP)
MLS 463 Found III	Fall2/Rachelle		Recognize how operations policies impact workflow within the laboratory.		Work effectively and contribute toward the productivity of the laboratory team.	Apply knowledge and skills acquired during subject specific coursework to the administrative	Adhere to established safety policies and practices to minimize injury to self and others.	Communicate in a manner sufficient to serve the needs of patients, the public and members of the health care team.

						and supervisory duties conducted within the laboratory department.		
Microbiology Series								
MLS 464 Parasit/Mycology	Fall/Darrell	Identify and accurately report parasites in laboratory samples.	Identify and accurately report yeast and molds in laboratory samples.					
MLS 422 Molecular	Summer/Caroline	Perform and interpret nucleic acid amplification				Discuss and perform quality control and quality assurance practices that are specific to a molecular testing laboratory		Effectively communicate and discuss various testing methodologies and current practices used in the molecular laboratory for the isolation, quantification, qualification and interpretation of DNA, RNA and Protein from patient samples
MLS 444 Micro I	Winter/Darrell	Identify bacterial commonly found in clinical samples using identification schema.	Identify bacteria commonly found in clinical samples using identification schema.			Accurately report biochemical tests used in identification of bacteria.		
MLS 445 Micro II	Spring/Darrell	Identify, perform, and report appropriate biochemical tests for organism identification.	Analyze and interpret microbiology culture test results.					
Blood Bank Series								
MLS 420 Immunology	Fall/Laurie	Accurately perform immunology procedures on an variety of methods using patient and QC samples.	Identify analytical process errors and how they impact results.					
MLS 443 BB I	Spring/Rachelle	Perform serological testing sufficient to identify an appropriate blood product for transfusion.	Use probability of antigenic frequency in various populations to choose an appropriate number of potential donors to screen for compatibility for a given patient.	Recognize cultural and global factors that impact the blood supply and ability to find compatible blood.		Perform appropriate Quality Control sufficient to determine that the test system for pretransfusion testing is operational.		
MLS 453 BB II	Summer/Rachelle	Perform appropriate testing to detect and/or prevent Hemolytic Disease of the Newborn	Identify the type of transfusion reaction most likely occurring given a set of patient symptoms and transfusion history.		Recognize the stress involved in managing a patient workload within the Blood Bank setting.		Handle, Store and Transport Blood Components according to published guidelines.	Determine and Communicate to the clinician the appropriate component to transfuse to a patient given sufficient patient clinical situation information

Section 3 – Curriculum Map

During the *pre-professional phase* of study, students complete a minimum of **95-quarter hours** that includes (a) 47-quarter hours of general education coursework, including two college-level math courses, one of which must be statistics; (b) 24-quarter hours of biology (200 level or above) that must include one microbiology course and one immunology course; and (c) 24-quarter hours of chemistry (200 level or above). Through an application process, students are selected to enter the professional portion of the program which includes **85 quarter hours** of advanced course work for a total of 180 credits to graduate.

The program's learning outcomes are stratified throughout the MLS **professional program** curriculum which is completed in **12 months and capped by a 12-week externship** in the professional clinical setting. Each instructor identifies within their course outcomes, alignment to program and institutional outcomes and specific assignments that provide measurements of student performance on the outcomes. Care was taken to ensure that each outcome is measured by a different instructor and at different levels of competency throughout the curriculum. Following is a map that identifies courses that measure the outcomes, instructors and the level of measure from **foundational** knowledge (initial introduction to the concept), **practice** performance (built upon concepts from previous learning), and **capstone** competency (students are masters of the material).

Curriculum Map for the Professional Program with stratified PSLO:

COURSE	Term/Instructor	PSLO1	PSLO2	PSLO3	PSLO4	PSLO5	PSLO6	PSLO7
University ISLO		Quantitative Literacy	Inquiry and Analysis	Ethical Reasoning and Diversity				Teamwork and Communication
Hematology Series								
MLS442 Hem I	Fall/Dawn	F	F				F	F
MLS 452Hem II	Winter/Dawn	P	P					
MLS 449 UA	Spring/Caroline	F	P		P	P		p
MLS 424 Hemostasis	Summer/Dawn	P	P				P	P
MLS 471 Externship	Fall2/Dawn	C	C	C	C	C	C	C
Chemistry Series								
MLS 415 Chem I	Winter/Laurie	F	F			F		F
MLS 416 Chem II	Spring/Laurie	P	P		F			P
MLS 475 Capstone	Summer/Rachelle		C			C	C	C
MLS 470 Externship	Fall2/Laurie	C	C	C	C	C	C	C
Foundations Series								
MLS 432 Found I	Fall/Caroline		F	P	F	P	F	
MLS 462 Found II	Winter/Rachelle		P	P		P	P	P
MLS 463 Found III	Fall2/Rachelle		C		C	C	C	C
Microbiology Series								
MLS 464 Parasit/Mycology	Fall/Darrell	P	F					
MLS 422 Molecular	Summer/Caroline	P				P		C
MLS 444 Micro I	Winter/Darrell	F	F			F		
MLS 445 Micro II	Spring/Darrell	P	P					
MLS 472 Externship	Fall2/Darrell	C	C	C	C	C	C	C
Blood Bank Series								
MLS 420 Immunology	Fall/Laurie	F	F					
MLS 443 BB I	Spring/Rachelle	F	F	P		F		
MLS 453 BB II	Summer/Rachelle	P	P		P		P	P
MLS 473 Externship	Fall2/Rachelle	C	C	C	C	C	C	C

Section 4 – Assessment Cycle

The assessment of the Medical Laboratory Science program follows a **systematic** timeline of activities each academic year concluding with the preparation of this Annual Program Assessment Report that is published with the Office of Academic Excellence at Oregon Institute of Technology and externally on the University website at <https://www.oit.edu/academic-excellence/assessment/reports/mls/medical-laboratory-science> .

Timeline of Assessment Activities:

December	<ul style="list-style-type: none"> Students Graduate Graduates apply for Certification
January	<ul style="list-style-type: none"> Graduates take Certification Exam Graduates apply for jobs
February	<ul style="list-style-type: none"> New Hires begin training Graduates take Institutional Evaluation Survey
March	<ul style="list-style-type: none"> BOC pass rates reviewed by faculty Faculty begin to tabulate post-graduation placement
April	<ul style="list-style-type: none"> Annual Performance Evaluations (APE) of faculty Annual Planning of curriculum objectives by faculty Review of Course Evaluations
May	<ul style="list-style-type: none"> Employer survey sent (every three years)
June	<ul style="list-style-type: none"> MLS Advisory Board Meeting Faculty curriculum data collection check-in for assessment
July	<ul style="list-style-type: none"> Alumni Survey sent Faculty Assessment planning for learning outcomes retreat Senior Exit Survey data available
August	<ul style="list-style-type: none"> Assessment Report is written Faculty meeting to discuss assessment process improvements
September	<ul style="list-style-type: none"> Current cohort attends externship & New cohort begins courses Faculty collect clinical affiliate feedback on student performance
October	<ul style="list-style-type: none"> Assessment report is due to the University NAACLS report is due
November	

This report contains data and actions from three different cohorts that are present during the academic year 2024-25. The same data is collected from each cohort **annually** which includes measurements of student work on all educational outcomes (PSLO and ISLO), student senior exit survey, preceptor evaluations of student performance, job placement, graduation, retention, and certification passage. This report contains complete **post-graduation success** data on class of 2024, defined as those students that graduated at end of Fall term 2024. This report contains complete **curricular data** from class of 2025, defined as those students that have completed the entire year of didactic learning, but are set to graduate at the end of fall term 2025 after externship. This report contains **plans** for the collection of data and actions to be taken to improve the experience of class of 2026, defined as those students beginning curriculum in fall of 2025.

Additional post-graduation success data in the report may be from classes 2021, 2022, and 2023 to judge long term trends that help interpret data produced from class of 2024 and 2025.

Course work included in the data collection is for all courses delivered in the professional program. Faculty determined that collection of data for all courses each year provided more actionable data for programmatic assessment.

	Act	Collect	Plan
	2023-2024	2024-2025	2025-2026

Data Set	Cohort Class of 2024 Complete data set available. Cohort graduated end of Fall term. Post graduation success data includes: <ul style="list-style-type: none"> • Alumni Survey • Employment data • Certification • Graduation • All course work • Curriculum performance • PDE 	Cohort Class of 2025 Incomplete data set available. Cohort has completed academic coursework but has not graduated <ul style="list-style-type: none"> • All course work • Curriculum performance Plan to collect post-graduation success data.	Cohort Class of 2026 Incoming cohort beginning curriculum. Plan for curriculum collection for this cohort during the coming academic year.
Actions taken on curriculum	Gaps in this data indicated actions that were taken during academic year 2024-25.	Compare curricular performance of this cohort to previous cohort to determine success of previous actions taken. Gaps in this data generate new actions to be taken in academic year 2025-26.	Implement actions. Develop measures for success of the new actions planned for this cohort.
Actions taken on programmatic success	Gaps in post-graduation success data indicate trends to be watched. This cohort plus three previous years' cohorts complete data verify success of previous actions taken. Cohorts included: class of 2023, class of 2022, class of 2021.	Communication is maintained with cohort in order to collect post-graduation success data. As trends appear, action plans develop.	Action plans implemented to improve post-graduation success. Plan to review trends when data becomes available to verify success of actions taken.

Section 5 – Assessment Data Collection Processes

Curricular Evaluation of Student performance in the Program: Student artifact

MLS faculty have standardized the following criteria for student work artifact collection:

- **Performance Target:** 85% of student work will meet the criteria of the assignment to gain a grade of B or better. By capstone performance, all students should be meeting performance target.
- **Sample:** All registered students in the 2023-24 cohort class.
- **Accountability:** The assigned instructor of the course will be grading the assignment. In some circumstances, faculty team grading may be used when course numbers have multiple instructors. As it is stored on a shared program drive, raw assessment data is viewable by all program faculty.
- **Representation:** Student data is categorized by online vs in-person coursework delivery and traditional vs decelerated student status on data entry worksheets. Reported numbers in the following tables include all modalities because they include all students taking each course. Faculty interpretations consider the disaggregated data.

Activities and **Rubrics** used for outcomes assessment are updated annually by the instructor based on the performance of the cohort in the previous academic year. Rubrics and assignment descriptions are maintained in program shared file by year and class. These activities assessed during 2024-25 academic year are listed in the following table:

COURSE	PSLO1	PSLO2	PSLO3	PSLO4	PSLO5	PSLO6	PSLO7
University ISLO	Quantitative Literacy	Inquiry and Analysis	Ethical Reasoning and Diversity				Teamwork and Communication

Hematology Series							
MLS442 Hem I	Practical Exam	Calculations on Final				Safety Scenarios	RBC procedure lab reports
MLS 452 Hem II	Differentials	Unknowns					
MLS 449 UA	Practical Exam	Case History Exam		Lab Practical	Lab2 Worksheet		You are the Expert presentation
MLS 424 Hemostasis	Lab Exercises grade	Case Questions on Final					Immunohematology / Hemostasis Case Study presentation
Chemistry Series							
MLS 415 Chem I	Practical Exam	Final Exam-Calculations					
MLS 416 Chem II	Dilutions Lab	Method Comparison Lab					Final Lab Activity
MLS 475 Capstone		Calculations			Training Plan	Background Research	Validation Report
Foundations Series							
MLS 432 Found I		Lab Math Exam	Ethics Project	Phlebotomy practical	QC/QA exam	Create a Safety Exam	
MLS 462 Found II		Journal Critique	Corrective Action Cases		Schedule	Inspection Cases	SOP
MLS 463 Found III		Completed Checklist		Sim Lab	Reviewed a Policy	Safety or Inspections training	IPE
Microbiology Series							
MLS 464 Parasit/Mycology	Photo Exam	Case Study Exam					
MLS 444 Micro I	Lab Practical	Weekly Exam Total			Lab 9		
MLS 445 Micro II	Total lab activities	Case Study Exam					
Blood Bank Series							
MLS 420 Immunology	Protocol Quiz	Lab problem solving questions					
MLS 443 BB I	Practical Exam	Midterm 2 Frequency Calculations	Global Discussion Board		QC Lab Grade		
MLS 453 BB II	Lab Score	Calculations Questions	Donor Discussion Board	Prioritization Lab		Components Questions	Immunohematology / Hemostasis Case Study
Stand Alone Courses							
MLS 422 Molecular	Lab 3				PCR contamination lab		Teach the class Presentation

External Evaluation of Student performance on Learning Outcomes

Indirect measure of student achievement is taken from **Senior Institutional Evaluation Survey**. The survey asks the students to rate if their time in the program met the stated PSLOs and ISLOs. Student perspective on their own learning is relevant to demonstrated confidence with the material given and general satisfaction with the instruction given. Student exit survey is meant to evaluate student satisfaction at the end of the program. **Minimum acceptability standard for student exit survey is 85% of students rating themselves as impacted “quite a bit” or “very much”** by their time in the program for the stated outcome.

Direct measure at the capstone level is made from the **Professional Development Evaluation (PDE)** completed by the clinical preceptors during externship. **Minimum acceptability standard for PDE performance is 95% of all students receiving a grade of 2 or greater** on all evaluated criteria. Any rating of 1 on the PDE results in an academic action plan for the student.

Post Graduation Success of the Program: NAACLS Requirements

The Medical Laboratory Science professional program is accredited by the *National Accrediting Agency for Clinical Laboratory Science (NAACLS)*, 5600 North River Road, Suite 720, Rosemont, Illinois 60018-5119. NAACLS requires annual submission of program assessment data to include certification results, graduation rates, employment rates, and attrition rates.

Graduation and attrition data is gathered from **University registrar records**. Board Certification Passage is generated in a report from **ASCP** by the department Program Director. Placement data is gathered through both the **Senior Institutional Evaluation survey** administered by the Office of Academic Excellence and **faculty contact** with recent graduates. All data is stored on a shared assessment file maintained by the Program Assessment Coordinator.

OIT/OHSU MLS program has set the following performance target for achievement of the cohort on these data:

	NAACLS Minimum Standards
Certification Passage	75%
Graduation Rate	70%
Placement Rate	70%
Attrition	Must be documented

Note: All percentages refer to % of students admitted to the program in the academic year documented.

What you Found – The data collected

Section 6 – Assessment Data and Interpretations

In this section, the data is presented for **2024-2025** academic year. The cohort expected to graduate in **2025**, which is 39 students with 4 decelerated and 0 online, provides the data for **course work**. The cohort that did graduate in **2024**, which was 34 students including 2 decelerated and 0 online, provided the data for **Student Success indicators**.

This program has begun offering a decelerated option as of 2022-2023 academic year. The first graduates from this decelerated option are represented in the 2024 Student Success data. For academic year 2025-26, data from the online option taking students fall of 2025 will also be represented.

Performance Criteria	Assessment Methods	Performance Target	Results				Interpretation
Learning Outcomes							
PSLO1- Competency ISLO- Quantitative Literacy	Direct: Course specific Project Grade	85% of student work will meet the criteria of the assignment to gain a grade of B or better.	F	MLS442 Hem I	89	Met	
	Indirect: Institutional Evaluation Survey		P	MLS 452Hem II	97		
			F	MLS 449 UA	97		
		P	MLS 424 Hemostasis	100			
		F	MLS 415 Chem I	87.5			
		P	MLS 416 Chem II	92.5			
		F	MLS 464 Parasit/Mycology	85			
		F	MLS 444 Micro I	90			
	P	MLS 445 Micro II	97				
	F	MLS 420 Immunology	92.5				

			<table><tr><td>F</td><td>MLS 443 BB I</td><td>97.3</td></tr><tr><td>P</td><td>MLS 453 BB II</td><td>100</td></tr><tr><td>P</td><td>MLS 422 Molecular</td><td>100</td></tr></table> Decelerated – 90% Survey - 100% PSLO1; 100% QL			F	MLS 443 BB I	97.3	P	MLS 453 BB II	100	P	MLS 422 Molecular	100																																					
F	MLS 443 BB I	97.3																																																	
P	MLS 453 BB II	100																																																	
P	MLS 422 Molecular	100																																																	
PSLO2-Problem Solving ISLO – Inquiry & Analysis	Direct: Course specific Project Grade Indirect: Institutional Evaluation Survey	85% of student work will meet the criteria of the assignment to gain a grade of B or better. 85% student rated themselves proficient or better	<table><tr><td>F</td><td>MLS442 Hem I</td><td>84</td></tr><tr><td>P</td><td>MLS 452Hem II</td><td>92</td></tr><tr><td>F</td><td>MLS 449 UA</td><td>100</td></tr><tr><td>P</td><td>MLS 424 Hemostasis</td><td>78</td></tr><tr><td>F</td><td>MLS 415 Chem I</td><td>85</td></tr><tr><td>P</td><td>MLS 416 Chem II</td><td>90</td></tr><tr><td>C</td><td>MLS 475 Capstone</td><td>100</td></tr><tr><td>F</td><td>MLS 464 Parasit/Mycology</td><td>82.5</td></tr><tr><td>F</td><td>MLS 444 Micro I</td><td>92</td></tr><tr><td>P</td><td>MLS 445 Micro II</td><td>92</td></tr><tr><td>F</td><td>MLS 420 Immunology</td><td>92.5</td></tr><tr><td>F</td><td>MLS 443 BB I</td><td>60</td></tr><tr><td>P</td><td>MLS 453 BB II</td><td>83.7</td></tr><tr><td>F</td><td>MLS 432 Foundations I</td><td>78</td></tr><tr><td>P</td><td>MLS 462 Foundations II</td><td>94%</td></tr></table> Decelerated – 61% Survey – 100% PSLO2; 100% IA			F	MLS442 Hem I	84	P	MLS 452Hem II	92	F	MLS 449 UA	100	P	MLS 424 Hemostasis	78	F	MLS 415 Chem I	85	P	MLS 416 Chem II	90	C	MLS 475 Capstone	100	F	MLS 464 Parasit/Mycology	82.5	F	MLS 444 Micro I	92	P	MLS 445 Micro II	92	F	MLS 420 Immunology	92.5	F	MLS 443 BB I	60	P	MLS 453 BB II	83.7	F	MLS 432 Foundations I	78	P	MLS 462 Foundations II	94%	Met. Lower level course work demonstrates improvement through curriculum.
F	MLS442 Hem I	84																																																	
P	MLS 452Hem II	92																																																	
F	MLS 449 UA	100																																																	
P	MLS 424 Hemostasis	78																																																	
F	MLS 415 Chem I	85																																																	
P	MLS 416 Chem II	90																																																	
C	MLS 475 Capstone	100																																																	
F	MLS 464 Parasit/Mycology	82.5																																																	
F	MLS 444 Micro I	92																																																	
P	MLS 445 Micro II	92																																																	
F	MLS 420 Immunology	92.5																																																	
F	MLS 443 BB I	60																																																	
P	MLS 453 BB II	83.7																																																	
F	MLS 432 Foundations I	78																																																	
P	MLS 462 Foundations II	94%																																																	
PSLO3- Professionalism ISLO- Ethical Reasoning ISLO-Diverse Perspectives	Direct: Course specific Project Grade Indirect: Institutional Evaluation Survey	85% of student work will meet the criteria of the assignment to gain a grade of B or better. 85% student rated themselves proficient or better	<table><tr><td>P</td><td>MLS 443 BB1</td><td>100</td></tr><tr><td>F</td><td>MLS 432 Foundations I</td><td>100</td></tr><tr><td>P</td><td>MLS 462 Foundations II</td><td>97</td></tr><tr><td>P</td><td>MLS 462 Foundations II</td><td>100</td></tr></table> Decelerated – 91% Survey – 100% PSLO3 87% Ethical Reasoning 87% DP			P	MLS 443 BB1	100	F	MLS 432 Foundations I	100	P	MLS 462 Foundations II	97	P	MLS 462 Foundations II	100	Met.																																	
P	MLS 443 BB1	100																																																	
F	MLS 432 Foundations I	100																																																	
P	MLS 462 Foundations II	97																																																	
P	MLS 462 Foundations II	100																																																	
PSLO4-Stress Management	Direct: Course specific Project Grade Indirect: Institutional Evaluation Survey	85% of student work will meet the criteria of the assignment to gain a grade of B or better. 85% student rated themselves proficient or better	<table><tr><td>P</td><td>MLS 449 UA</td><td>97</td></tr><tr><td>F</td><td>MLS 432 Foundations I</td><td>100</td></tr><tr><td>C</td><td>MLS 463 Foundations III</td><td>100</td></tr><tr><td>P</td><td>MLS 453 BBII</td><td>100</td></tr></table> Decelerated – 90% Survey – 100% PSLO4			P	MLS 449 UA	97	F	MLS 432 Foundations I	100	C	MLS 463 Foundations III	100	P	MLS 453 BBII	100	Met.																																	
P	MLS 449 UA	97																																																	
F	MLS 432 Foundations I	100																																																	
C	MLS 463 Foundations III	100																																																	
P	MLS 453 BBII	100																																																	
PSLO5- Administration and Quality Control	Direct: Course specific Project Grade	85% of student work will meet the criteria of the assignment to gain	<table><tr><td>P</td><td>MLS 449 UA</td><td>100</td></tr><tr><td>F</td><td>MLS 444 Microbiology I</td><td>87</td></tr><tr><td>F</td><td>MLS 443 BB I</td><td>94</td></tr></table>			P	MLS 449 UA	100	F	MLS 444 Microbiology I	87	F	MLS 443 BB I	94	Met.																																				
P	MLS 449 UA	100																																																	
F	MLS 444 Microbiology I	87																																																	
F	MLS 443 BB I	94																																																	

	Indirect: Institutional Evaluation Survey	a grade of B or better. 85% student rated themselves proficient or better	F P C P	MLS 432 Foundations I MLS 462 Foundations II MLS 475 Capstone MLS 422 Molecular	95 86 100 100	Decelerated – 91% Survey – 100% PSLO5
PSLO6- Safety and Compliance	Direct: Course specific Project Grade Indirect: Institutional Evaluation Survey	85% of student work will meet the criteria of the assignment to gain a grade of B or better. 85% student rated themselves proficient or better	F P F P C	MLS 442 Hematology I MLS 453 BB II MLS 432 Foundations I MLS 462 Foundations II MLS 475 Capstone	59 94.6 100 100 100	Met No trends
PSLO7- Professional Communication ISLO- Communication ISLO- Teamwork	Direct: Course specific Project Grade Indirect: Institutional Evaluation Survey	85% of student work will meet the criteria of the assignment to gain a grade of B or better. 85% student rated themselves proficient or better	P C P F C C P C	MLS 449 UA MLS 424 Hemostasis MLS 416 Chem II MLS 442 Heme I MLS 453 BB II MLS 422 Molecular MLS 462 Foundations II MLS 475 Capstone	100 100 92.5 100 100 100 81 100	Met No trends Decelerated – 94% Survey – 100% PSLO 7 87% Writing 100% Speaking 87% Teamwork
Student Success Indicators						
Graduation Rate	Registrar's Office	>75%	100%		Met	
Attrition	Registrar's Office	Must be tracked	0		Met	
Placement	Institutional Evaluation Survey	6 months post-graduation employment >75%	87%		Met	
Program Certification %	ASCP & AMT Board Exams	>75 %	100%		Met	
External Assessment	Externship PDE	>95% rated 2 or above	100%		Met	

Interpretation of Results:

- Cohort 2024:** This cohort had teamwork and professionalism challenges in the classroom. Much work was done by faculty to encourage teamwork practice toward the end of the curriculum. Evaluators on externship only had good things to say about professional conduct of this cohort so the efforts are viewed as successful. To continue the momentum, the program enrolled in two Interprofessional activities during 2024-25 with the next cohort.

- **Cohort 2025:** Though this cohort had the highest GPA of any entering cohort, these students performed lower on final exams and in course work. Much work was done during 2024-25 academic year with extra-curricular supports and out of class meetings with individual students to bring up academic performance. Supports added included: tutoring, extra in-class worked problem examples, weekly individual meetings, individual ad-hoc worksheets, individual competency assessments, additional assigned readings.
- **Modalities:** All MLS students were included in the data set. When disaggregated, no different trends were observed in decelerated students' academic performance as compared with the whole group. Deceleration did not appear to impact Certification passage or the ability for students to find employment post –graduation. In fact, students were retained that would have stopped-out with the availability of this option. Faculty will continue to monitor academic performance over time. Students in deceleration often decelerate for reasons that would impact their academic performance which might bias the data set. Keeping multiple measures in place for the success of these students is important to reduce this bias.
- **Growth in Curriculum:** Faculty have chosen to collect outcomes data from Foundational course work and Capstone coursework to monitor progress through the curriculum. This allows early intervention for students struggling academically. Foundations I, taught fall term, has several outcomes measured that indicate additional actions to be taken in later courses. Students struggling in this course in math will be directed to tutoring and students struggling in this course with microscopy or pipetting have instigated the development of additional exercises added to Chemistry courses to support these skills. Many of the early courses assessed demonstrated lower student performance for PSLO2 that was improved in later assessments.
- **External Evaluation of the Program:** External evaluation of the program is provided mainly through feedback on student performance during externship. Any student rated as 1 on any PDE must complete an action plan and may repeat the externship experience before graduating. Previous to this year, PDE were tracked for specific items linked to PSLO. This year, all items on the PDE will provide data for programmatic assessment. This year the theme on externship comments about class of 2024 was about their professional integrity. Many evaluators were impressed with their calm under pressure, knowing what to do when working through a problem, and their contributions to the team. The following is a snapshot of comments about our students:
 - [She] is very diligent and great with details. The ability to appear calm under pressure is a great asset and will serve her well. She works well with everyone on the team and is professional both in internal situations and when dealing with outside providers.
 - She was helpful and aware of her surroundings. She was aware of what to do when alarms went off for the IH instrument. She maintained professionalism in the lab and was courteous when interacting with lab personnel and hospital staff.
 - [She] understands theory very well and shows interest in learning. She helped calibrate the centrifuge.
- **Outlook for the Workforce:** Much has changed over the last year in Portland-metro job market. Several of the main hospitals that provided both externship and employment for MLS students consolidated, leaving many seasoned Medical laboratory scientists out of work and job-hunting along-side the newly graduated students. Those that stayed in Portland had a more difficult time finding employment than those that left for different areas. Post-graduation success dropped for the first time and many of these students have not responded to repeated inquiries about their employment status. 40% of students held positions at graduation and those that delayed graduation had better luck finding positions than those that flooded the market in December and January. It was also observed that the Advisory Board members who met in June didn't have as many positions open as in past years, though the rural and out of state labs still had openings. The good news is that most of the migration has concluded in Portland and the retirements and promotions that open new positions are still anticipated. MLS faculty are watching the situation closely and assigning externship sites accordingly. This year there has been more support from faculty and career services for the new alumni alerting them to positions opened. One comment from an advisory board member alerted faculty to the need for expectation setting at orientation with the new cohort in fall 2025. Students need to be aware that in a market like this one, the openings are on off-shifts or undesirable shifts. Students should recognize these positions as getting their foot in the door for the job they really want.

Evidence of Improvement in Student Learning

History of Results: Met Not Met Not Assessed

Outcomes	Class of 2025	Class of 2024	Class of 2023	Class of 2022	Class of 2021
PSLO1 Competency	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I
	MLS 452Hem II	MLS 452Hem II	MLS 452Hem II	MLS 452Hem II	MLS 452Hem II
	MLS 449 UA	MLS 449 UA	MLS 449 UA	MLS 449 UA	MLS 449 UA
	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis
	MLS 415 Chem I	MLS 415 Chem I	MLS 415 Chem I	MLS 415 Chem I	MLS 415 Chem I
	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II
	MLS 464 Parasit/Mycology	MLS 464 Parasit/Mycology	MLS 464 Parasit/Mycology	MLS 464 Parasit/Mycology	MLS 464 Parasit/Mycology
	MLS 422 Molecular	MLS 422 Molecular	MLS 422 Molecular	MLS 422 Molecular	MLS 422 Molecular
	MLS 444 Micro I	MLS 444 Micro I	MLS 444 Micro I	MLS 444 Micro I	MLS 444 Micro I
	MLS 445 Micro II	MLS 445 Micro II	MLS 445 Micro II	MLS 445 Micro II	MLS 445 Micro II
	MLS 420 Immunology	MLS 420 Immunology	MLS 420 Immunology	MLS 420 Immunology	MLS 420 Immunology
	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I
	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II
	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I
	MLS 452Hem II	MLS 452Hem II	MLS 452Hem II	MLS 452Hem II	MLS 452Hem II
PSLO2 Problem-solving	MLS 449 UA	MLS 449 UA	MLS 449 UA	MLS 449 UA	MLS 449 UA
	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis
	MLS 415 Chem I	MLS 415 Chem I	MLS 415 Chem I	MLS 415 Chem I	MLS 415 Chem I
	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II
	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone	MLS 417 Capstone	MLS 407 Capstone
	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I
	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II
	MLS 464 Parasit/Mycology	MLS 464 Parasit/Mycology	MLS 464 Parasit/Mycology	MLS 464 Parasit/Mycology	MLS 464 Parasit/Mycology
	MLS 444 Micro I	MLS 444 Micro I	MLS 444 Micro I	MLS 444 Micro I	MLS 444 Micro I
	MLS 445 Micro II	MLS 445 Micro II	MLS 445 Micro II	MLS 445 Micro II	MLS 445 Micro II
	MLS 420 Immunology	MLS 420 Immunology	MLS 420 Immunology	MLS 420 Immunology	MLS 420 Immunology
	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I
	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II
	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone
	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I
PSLO3 Ethics	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II
	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I
	MLS 449 UA	MLS 449 UA	MLS 449 UA	MLS 449 UA	MLS 449 UA
	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II
	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone
PSLO4 Stress	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I
	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II
	MLS 449 UA	MLS 449 UA	MLS 449 UA	MLS 449 UA	MLS 449 UA
	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II
	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone

PSLO5 Quality Control	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis
	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone
	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I
	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II
	MLS 422 Molecular	MLS 422 Molecular	MLS 422 Molecular	MLS 422 Molecular	MLS 422 Molecular
	MLS 444 Micro I	MLS 444 Micro I	MLS 444 Micro I	MLS 444 Micro I	MLS 444 Micro I
	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I	MLS 443 BB I
	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I
PSLO6 Safety & Compliance	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone	MLS 407 Capstone
	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I	MLS 432 Found I
	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II
	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II
	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I	MLS442 Hem I
	MLS 449 UA	MLS 449 UA	MLS 449 UA	MLS 449 UA	MLS 449 UA
PSLO7 Communication	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis	MLS 424 Hemostasis
	MLS 415 Chem I	MLS 415 Chem I	MLS 415 Chem I	MLS 415 Chem I	MLS 415 Chem I
	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II	MLS 416 Chem II
	MLS 475 Capstone	MLS 475 Capstone	MLS 407 Capstone	MLS 417 Capstone	MLS 407 Capstone
	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II	MLS 462 Found II
	MLS 422 Molecular	MLS 422 Molecular	MLS 422 Molecular	MLS 422 Molecular	MLS 422 Molecular
	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II	MLS 453 BB II
Average Certification score	NA	530	583	545	519
Certification Rate	NA	100% total pass rate	100% total pass rate	91% total pass rate	97% total pass rate
		97% first time pass rate	93% first time pass rate	88% first time pass rate	88% first time pass rate
Graduation Rate	NA	97%	100%	97%	100%
Employment	NA	86%	100%	100%	100%
Attrition #	0	2 delayed graduation 2 decelerated	A large number of students dropped in first two weeks + 2 decelerated, 1 withdrew.	2/39; 1 delayed for medical, 1 delayed for family	0

Interpretation of Past Trends:

- Trends:** Most gaps in student performance are individual cohort gaps and not trends with the exception of mathematics performance as seen in the first assessment of student performance on a new equation like Hemostasis, Foundations I, and BB1. Students are often not performing as well on these early assessments. With practice and once in externship and on the Certification exam, students perform adequately enough for the

workforce. These assignments continue to be used to identify additional curricular supports needed. Other indicators show that students continue to fair well on certification exams and graduation rates.

- **New Gaps:** New gaps identified were employment, written assignments, and identification with images early in curriculum. The assignment gaps appear to improve with time in the curriculum. The employment gap will be monitored by faculty continuously in the coming year.
- **Improvements:** Students have shown improvement in gaps seen for professionalism, diverse perspectives, competency and compliance. The professionalism practice during interprofessional coursework, laboratory simulation, and teamwork practice in Method Validation have been attributed with the increase in competency seen on externship with these skills.

How are you using the data? – Action

Section 7 – Data-driven Action Plans:

Action Driver/Course	Action Taken	Accountable Person	Resources Needed	Outcome Measure
PSLO2 Program Trend	Introducing study skills early to the cohort. At Orientation students will be provided a Worksheet of known study techniques be provided a study techniques presentation - Cohort	Rachelle/Dawn	AVID study resources	PSLO2 2025-26
PSLO2 – Quantitative Literacy Low performance in: MLS432, MLS464, MLS442, MLS444, MLS443, MLS453, MLS424	Media Lab to be used for Lab Math pre-self assessment in MLS432	Caroline	Media Lab software	PSLO2 2025-26
External Evaluation: Employment	Discussion with all students in MLS462 about setting realistic expectations for positions in the medical field to include variable hours and rural locations.	Rachelle	Alumni and Affiliate Surveys	Surveys in 2026 Summer
PSLO6 Individual course: MLS442	Change the assignment from an independent Canvas activity to a group activity.	Dawn	None	PSLO6 MLS442 2025-26
PSLO7 Individual course: MLS462	New assignment developed for students to use the rubric to evaluate an AI generated SOP for accuracy and formatting.	Rachelle	None	PSLO7 MLS462 II 2025-26
Accreditation Changes requiring addition of Interprofessional curriculum Communication Teamwork	Interprofessional Practice developed for Dental Hygiene and MLS cohorts will be assessed in Chemistry. Interprofessional items added to MLS463 Capstone.	Rachelle and Laurie	Dental Hygiene collaboration	MLS416 IPE assessment 2025-26 MLS463 Assignments 2025 Fall

Section 8 – Closing the Loop: Reflection on previous work

- Evaluation of 2023-2024 Past Actions:**

Action Driver	Action Planned	Taken?	New Outcome Measure	Interpretation
<p>PSLO1 – Competency Inquiry and Analysis MLS444</p> <p>Program Trend Identified: <i>Final Exam and practical exam performance had higher failure rates in multiple courses than previous years.</i> MLS443, MLS442, MLS415, MLS416,</p>	<p>Lecture and Lab competencies will be considered separate requirements for passing program subject specific courses that have a comprehensive final exam and comprehensive practical exam.</p> <p>Those courses are Micro I and II, BB I & II, Heme I and II.</p> <p>Students who do not pass the designated competencies for the laboratory portion or the lecture portion do not meet the essential requirements as listed in the student handbook. Students will be required to do remediation before moving on to the next course level regardless of overall course grade.</p> <p>Instructors will Begin tracking Final Exam performance for assessment.</p>	<p>Competencies identified in Blood Bank and Urinalysis and linked to Professional Development Evaluation and Essential Requirements not the course grade.</p> <p>2 courses enacted remediations.</p>	<p>PDEs</p>	<p>Success.</p> <p>We will keep the essential requirements and PDE practice.</p> <p>Final exam and practical being separate grades was not practical to initiate.</p>
<p>PSLO2 – Problem Solving Quantitative Literacy Low performance in MLS415, MLS432, MLS443, MLS453, MLS442, MLS445</p> <p>Program Trend Identified: <i>Early low performance on formative</i></p>	<p>MLS432 Calculations exam will serve as gate-keeper assignment identifying students who need Student Tutor center mathematics support. Students who fail the exam will be required to attend one tutoring session and have the tutor sign off on student performance of laboratory mathematics. Additional mathematics worksheets will be added to both MLS415 and MLS443</p>	<p>Tutor center requirement enacted Fall term.</p>	<p>Improvement seen in PSLO2 for later mathematics courses via worksheets in MLS415.</p>	<p>Continue to monitor and add supports for mathematics practice including Adding media lab math practice to orientation and example problems worked through in courses.</p>

<i>Assignments based on laboratory math.</i>	courses for all students. Additionally, these identified students will be added to a study skills and habits course shell. General study skills and habits have been added to MLS orientation for all students.			
PSLO3 – Professionalism Diverse Perspectives & Global Awareness MLS462 Program Trend Identified: <i>Cohort</i> Teamwork and student interpersonal conflicts.	Re-organization of MLS462 course topics schedule including a Re-write of Myer's Briggs assignment and Leadership Lectures to incorporate more professional resiliency practice. Instructor to seek out industry stories, community speakers, and research-based resources on workplace resiliency topics. Teamwork collaboration from instructor of SPE311 at Orientation. Re-enroll in OHSU IPE year-long course. Development of allied health IPE practice within OIT.	MLS462 Re-Organization Completed. IPE completed DH IPE piloted SPE311 Instructor attended orientation.	PSLO3 demonstrated improvement. Course evaluation scores improved. Student survey demonstrated more engagement with DH IPE exercise.	Success. Necessary change for accreditation to include IPE exercise in curriculum. Added IPE required practice to externship.
Deceleration Track Introduced.	Student performance in deceleration track will be monitored and disaggregated from both cohorts by color tracking.	Student performance monitored.	Deceleration BOC - Both passed	Success.

- **Programmatic / curriculum Improvements** that were not Assessment Driven:
 1. Prerequisites for MLS422 were removed with the registrar.
 2. Online degree completion program opened for applicants.
 3. First cohort of decelerated students graduated.
- **Improvements in Assessment Process:**
 1. Aligned Interprofessionalism coursework to program learning outcomes.
 2. Separate tracking both of online and decelerated students was initiated.
 3. Used PDE as a single data point for external evaluation instead of collecting and reporting on individual PSLOs.
- **Faculty Discussion:** Faculty collected data all year then met at summer retreat in June to discuss assessment data and action plans. Assessment data was presented to Advisory Board in June 2025. Faculty are proud of the high Certification rate and external evaluations of our students and will continue creative curriculum development and to support teamwork and mathematics education for our students.
- **Student Success stories from the year:** Several students attended National Conference for ASCLS and received scholarships from the professional organizations. The student club was a vibrant part of student life on the Portland metro campus.

Program Assessment Report Feedback Rubric

2024-25 Assessment Report

Program:

Department Chair:

Program Assessment Report Author:

Rubric Measure	Well Developed, Progressing or Not included.
Program mission is aligned to University Mission	
Educational Objectives Wording is Actionable	
PSLO's are justified by Professional Standards	
PSLO'S are aligned to ISLO	
Curriculum Map: Scaffolding indicates Foundational, Practice, and Capstone Assessments by course	
Assessment Cycle is three years or less to cover all PSLO and ISLO	
During collection year, courses/assignments are specified that align to PSLO and ISLO	
Rubric: Criteria for grading the assignment is described (may include as an appendix)	
Sample: Number of samples reviewed is specified	
Accountability: Reviewer(s) of the assessments are specified	
Assessment data is collected across all locations and modalities	
Performance Targets of acceptability are indicated	
Reported data include: Graduation, Retention, Post Grad Success, PSLO, ISLO	
Interpretation: Current results are compared against performance targets	
Interpretation: Current results are compared against previous assessment	
Reports include actions planned for the next academic year.	
Action drivers: Items not meeting performance targets have actions planned	
Action drivers: Additional action plans for overall department improvement are indicated	
Action plans: Specifics of accountability and timelines are indicated	
Action plans: Actions are linked to identification of resources needed	
Close the Loop: Faculty discuss previous action plan success given new data	
Faculty discuss the assessment process and make any improvements necessary	

Directions: Please provide comments on any item that is not graded as well developed.