

What you Did – The Plan

Section 1 – Program Mission and Educational Objectives

NWCCU's standards for accreditation require that institutions offer "programs with appropriate content and rigor that are consistent with its mission" (1.C.1.)

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.

Program Alignment to Oregon Tech Mission and Core Themes

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.

Program Educational Objectives

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 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.

Section 2 – Program Student Learning Outcomes

NWCCU's standards for accreditation require that programs must "culminate in achievement of clearly identified student learning outcomes." (1.C.1.)

Seven measurable program specific learning outcomes have been defined that encompass both the university standards (Communication, Inquiry & Analysis, Ethical reasoning, Teamwork, Quantitative Literacy, and Global and Diverse Perspectives) and the objectives of the MLS program. Several of the standards also match National Accrediting standards. Students are measured for:

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.**

This outcome may be measured by the student's work product in all **laboratory** classes taught during the program. Professionally, students will be expected to demonstrate competency at the completion of on-the-job training and annually thereafter. The MLS program gives students knowledge of the subjects required to make clinical decisions, and also the ability to perform analytical testing as they would in the workplace. Each program course contains a demonstration of **competency** through the classroom laboratory exercises. Successful completion of the **externship** is based on a list of **competencies** that must be performed while the student is in the workplace. This programmatic outcome matches NAACLS standard entry level competencies of the Medical Laboratory scientist that state, "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, Immunohematology/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."

2. **Proficiency to problem-solve, troubleshoot, and interpret results, and to use statistical approaches when evaluating data.**

This outcome measures student **data analysis and inquiry** skill as well as their **quantitative literacy** or ability to interact with written results. Professionally students will be expected to read and interpret clinical data from automated instrumentation to determine if those results are accurate or to identify problems with instrumentation or samples. Student abilities are measured by performance on a comprehensive Certification exam, laboratory exercises and tests in course work throughout the program. Every class in the program focuses on data analysis and **troubleshooting** to some extent. This outcome matches NAACLS entry level competencies of the Medical Laboratory scientist that state, "The medical laboratory scientist will have diverse responsibilities in areas of analysis and clinical decision-making."

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.**

This outcome measures student **ethical reasoning** with a focus on interprofessional interaction of a team caring for a patient. Ethical issues are discussed in most courses throughout the program. **Foundations of Medical Laboratory Science I** at the beginning of the program assigns students a specific **ethics project**. Students are also rated by their **externship** site at the end of the program for ethical understanding. Through the many team exercises provided students become aware of the **diverse perspectives** of the care giving team and the patient perspective. **Global** perspectives are introduced in many classes as reference ranges are discussed that pertain to specific communities. This outcome matches NAACLS entry level competencies of the Medical Laboratory scientist that state, "At entry level, the medical laboratory scientist will have skills in principles and practices of professional conduct..."

4. **Maintaining appropriate composure under stressful conditions.**

The program strives to teach this objective during laboratory simulations in student lab and capstone lab before clinical **externship**. Professional Development Evaluations from faculty and externship preceptors provide perspective data on student performance of this particular objective. Specifically, stress may be measured by cortisol levels in **MLS 416 Chemistry II** while the students concentrate on this subject. The program itself is rigorous and stressful; how a student comports themselves in the academic environment may show how they comport themselves in a professionally stressful environment, with heavy workload and emotional demands in the patient care setting.

5. **Administrative skills consistent with philosophies of quality assurance, continuous quality improvement, laboratory education, fiscal resource management.**

This outcome covers the managerial aspects of coursework. Students who graduate from the MLS program will be qualified to manage the clinical laboratory after two years of professional practice. Students are made aware of continuous improvement activities in their Foundations of Medical Laboratory Science courses and are given several tasks to perform on the subjects while out on externship. In course work, this objective may be measured by the completion of **specific projects** on education, quality control or finances. This outcome matches NAACLS entry level competencies of the Medical Laboratory scientist that state, *“At entry level, the medical laboratory scientist will have skills in principles and practices of administration and supervision as applied to clinical laboratory science and educational methodologies and terminology sufficient to train/educate users and providers of laboratory services.”*

6. **Application of safety and governmental regulations and standards as applied to medical laboratory practice.**

Since Medical Laboratory science is a highly regulated profession, students are required to become familiar with safety and best practice standards governing their laboratory actions. Students are required to participate in HIPAA education before working with OHSU patient samples. Students learn and perform Quality Control activities for most tests in the classroom laboratories and the Foundations of Medical Laboratory Science II class has an inspection exercise incorporated into the curriculum. This outcome is measured by student performance in quality control activities in the **laboratory** classroom and in **externship**. This outcome matches NAACLS entry level competencies of the Medical Laboratory scientist that state, *“At entry level, the medical laboratory scientist will have skills in application of safety and governmental regulations and standards as applied to clinical laboratory science.”*

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

This outcome measures students’ ability to **communicate** orally and in the written word. Oral communication is important to **teamwork** and will be necessary when dealing with other health care professionals, during work-load hand offs at shift change and during problem solving. Written communication is measured through the writing of reports and procedures. Students entering the program should already have experience with both types of communication. An **oral presentation** of a comprehensive case study is made during the last term of the didactic portion of the program. Students **work in groups** to organize and present the case study material. Students are also given a variety of reports to write for the various courses simulating those reports written professionally. This outcome matches NAACLS entry level competencies of the Medical Laboratory scientist that state, *“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.”*

Section 3 – Curriculum Map

NWCCU’s standards for accreditation requires that programs must demonstrate “an appropriate breadth, depth, sequencing, and synthesis of learning” of student learning outcomes. (1.C.2)

COURSE	PSLO1	PSLO2	PSLO3	PSLO4	PSLO5	PSLO6	PSLO7
University ISLO		Quantitative Literacy and Inquiry and Analysis	Ethical Reasoning and Diversity				Teamwork and Communication
Hematology Series							
MLS442 Hem I	F	F				F	
MLS 452Hem II	P	P					
MLS 449 UA	F	P		P	P		p
MLS 424 Hemostasis	P	P			P		P
MLS 471 Externship	C	C	C	C	C	C	C
Chemistry Series							

MLS 415 Chem I	F	F					F
MLS 416 Chem II	P	P		F			P
MLS 407 Capstone		C			C	C	C
MLS 470 Externship	C	C	C	C	C	C	C
Foundations Series							
MLS 432 Found I		F	P	F	P	F	
MLS 462 Found II		P	P		P	P	P
MLS 463 Found III		C		C	C	C	C
Microbiology Series							
MLS 464 Parasit/Mycology	P	F					
MLS 444 Micro I	F	F			F		
MLS 445 Micro II	P	P					
MLS 472 Externship	C	C	C	C	C	C	C
Blood Bank Series							
MLS 420 Immunology	F	F					
MLS 443 BB I	F	F	F		F		
MLS 453 BB II	P	P		P		P	P
MLS 473 Externship	C	C	C	C	C	C	C
Stand Alone Courses							
MLS 422 Molecular	P				P		C

Section 4 – Assessment Cycle

Description of Assessment Plan

The assessment of the Medical Laboratory Science program follows a systematic process and timeline concluding with the preparation of this Assessment report that is published with the Office of Academic Excellence. The Medical Laboratory Science professional program is also accredited by the *National Accrediting Agency for Clinical Laboratory Science (NAACLS)*, 5600 North River Road, Suite 720, Rosemont, Illinois 60018-5119. NAACLS requires program assessment data to include certification results, graduation rates, employment rates, and attrition rates from the previous three years and participation in accreditation activities as published in the NAACLS standards. The Oregon Institute of Technology Medical Laboratory Science program has specified additional **Program Specific Learning Outcomes (PSLO)** based on the mission of the program for assessment to be included in this report as well. These PSLOs are aligned with University ISLOs and specific course CLOs. Student data from CLOs supporting the PSLO & ESLO provide evidence of progress on curriculum improvement. The classes supplying assignments that are utilized for data collection on each outcome are assigned to a three-year **continuing process**. Classes in the planning year of the process are those of the incoming class beginning coursework in fall the year of the report publication date. Classes in the assess year are those of the class that is on externship fall the year of the report publication date. Classes in the act year are those of the class that graduated the previous December from the report publication date and to which complete data on outcomes, coursework, and student exit survey exists. Data collection and other assessment activities follow the annual schedule pictured in the figure below.



NAACLS MEASURES

NAACLS Accreditation criteria is assessed annually. Graduation, attrition and placement data is gathered from University graduation records and University **Student Exit Survey reports** that are provided to the assessment coordinator for use in annual assessment reporting. Board Certification Passage is generated in a report from ASCP by the Program Director. Additional placement data is gathered through faculty contact with recent graduates. Data is stored on a shared assessment data file by the assessment coordinator.

OIT/OHSU MLS program has set the following minimum standards for achievement on these data:

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

PSLO MEASURES

Indirect measure of student achievement is taken from a *student exit survey* of the December graduating class. The survey asks the students how they felt the program met the state PSLO. 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 during externship. Students are evaluated for achievement on professional objectives in knowledge, skills, habits and attitudes by the PDE. Objectives are listed on the form and the student is rated for each objective by an evaluation scale with a simple score of 1-3 (Not Met, Met, Exceed). Instructions for the rating scale are listed at the top of all evaluations. During each externship, an evaluation is filled out for the student per department the student rotates in. The externship site is allowed to have as many people as have worked with the student during their 4 weeks in the department to evaluate the student. Minimum acceptability standard for PDE performance is 95% of all students receiving a grade of 2 or greater on the specified criteria. This report contains complete information at the capstone level for class of 2020 using this direct measure. Currently class of 2021 data is being collected and any changes in assessment process of this criteria will impact class of 2022.

The following table summarizes data collection by this process annually.

PSLO #	1	2	3	4	5	6	7
PSLO 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, immunohematology, microbiology, molecular, hemostasis, urinalysis, body fluids, parasitology, mycology, virology and other emerging diagnostic venues.	Proficiency to problem-solve, troubleshoot, and interpret results, and to use statistical approaches when evaluating data.	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.	Maintaining appropriate composure under stressful conditions.	Administrative skills consistent with philosophies of quality assurance, continuous quality improvement, laboratory education, fiscal resource management.	Application of safety and governmental regulations and standards as applied to medical laboratory practice.	Effective communication skills to ensure accurate and appropriate information transfer.
University ISLO	Quantitative Literacy	Inquiry & Analysis	Ethical Reasoning & Diversity				Teamwork, Communication
PDE Question	10	18	36	8	7	3	50
Direct	Obtains accurate and precise results.	Shows logical thinking and resourcefulness in dealing with problems.	Demonstrates integrity and ethical behavior.	Maintains work Quality and Quantity under stress.	Performs appropriate quality control/ quality assurance procedures.	Follows laboratory institutional safety policies.	Receives/gives information to others effectively & courteously.
Indirect	How has the OIT experience contributed to this outcome?	How has the OIT experience contributed to this outcome?	How has the OIT experience contributed to this outcome?	How has the OIT experience contributed to this outcome?	How has the OIT experience contributed to this outcome?	How has the OIT experience contributed to this outcome?	Please rate your proficiency on this outcome?

Direct measure of PSLO data at the foundational and practice level is completed by data collection on *coursework* for all students in the course. While data is collected every year on coursework, the data is examined in a different way based on the three year cycle of plan-assess-act. Courses in their plan year will be examined by the instructor of the course for the assignment that is the best fit for the CLO and PSLO being measured. Instructors will be developing and changing rubrics based on the previous data collected from the course. Courses in their assess year are actively having the data examined and compared to previous data. These courses generate the development of action plans. Courses in their act year, have had data collected and have implemented action plans and the data collected will inform the efficacy of the action plan.

Below, the curriculum map has been distributed to a three year cycle such that every instructor and every subject is evaluated at every level each year and that all PSLOs are actively measured across the curriculum.

COURSE	PSLO1	PSLO2/ ESLO1	PSLO3/ ESLO 3	PSLO4	PSLO5	PSLO6	PSLO7/ ESLO 2	Year of Assessment
MLS442 Hem I	F	F				F	F	Assess – Class of 2022 ISLO: Communication, Ethics, Teamwork
MLS 463 Foundations III		C		C	C	C	C	
MLS 417 Chem III	P	P						
MLS 445 Micro II	P	P						
MLS 472 Externship	C	C	C	C	C	C	C	
MLS 443 BB I	P	P	P		F			
MLS 422 Molecular	P	F			P		C	
COURSE	PSLO1	PSLO2/ ESLO1	PSLO3/ ESLO 3	PSLO4	PSLO5	PSLO6	PSLO7/ ESLO 2	Year of Assessment
MLS 452Hem II	P	P						Plan Class of - 2023 ISLO: Global & Diverse Perspectives
MLS 449 UA	F	P		P	P	P		
MLS 415 Chem I	P	F			F		F	
MLS 470 Externship	C	C	C	C	C	C	C	
MLS 462 Found II		P	P		P	P	P	
MLS 464 Parasit/Mycology	P	F						
MLS 453 BB II	P	P		F		P	P	
MLS 407 Capstone		C			C	C	C	
COURSE	PSLO1	PSLO2/ ESLO1	PSLO3/ ESLO 3	PSLO4	PSLO5	PSLO6	PSLO7/ ESLO 2	Year of Assessment
MLS 424 Hemostasis	P	P					C	Act Class of 2021 ISLO: Inquiry and Analysis & Quantitative Literacy
MLS 416 Chem II	P	P		F			P	
MLS 432 Found I		F	P	F	P	F		
MLS 471 Externship	C	C	C	C	C	C	C	
MLS 444 Micro I	F	F			F			
MLS 420 Immunology	F	F						
MLS 473 Externship	C	C	C	C	C	C	C	

Section 5 – Assessment Data Collection Processes

NWCCU’s standards for accreditation require that institutions engage in “an effective system of assessment to evaluate the quality of learning in its programs” that “recognizes the central role of faculty in establishing quality, assessing student learning, and improving instructional programs.” (1.C.5.)

MLS faculty have standardized the following criteria for artifact collection:

- **Performance Target:** 85% of student work will meet. 95% of PDE grades will meet.
- **Activity:** Course work or PDE as specified.
- **Sample:** All registered students in the cohort.
- **Reliability:** The instructor of the designated course will be grading the assignment. The externship site coordinator will grade the PDE.
- **Rubric:** B or better on the assignment. 2 or higher on the PDE.

For Class of 2022, these Objectives were evaluated in the following courses by the following assignments.

SLO	PSLO	Courses/Level	Instructor	CLO	Assignment
Communication & Teamwork	Effective communication skills to ensure accurate and appropriate information transfer.	1)MLS463 C 2)MLS472 C 3)MLS422 P	Barrett Weber Doty	1) Communicate in a manner sufficient to serve the needs of patients, the public and members of the health care team. 2)Receives/gives information to others effectively & courteously. 3) 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	MLS472- PDE#50 MLS463 - Interviewed someone or made a phone call MLS422 - Teach the Class Assignment
Ethical Reasoning & Diverse Perspectives	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.	1)MLS472 C 2)MLS443 P	Weber Barrett	1)Demonstrates integrity and ethical behavior. 2) Use probability of antigenic frequency in various populations to choose an appropriate number of potential donors to screen for compatibility for a given patient.	1) MLS472 – PDE#36 2) Midterm 2 exam calculations.
Inquiry and Analysis & Quantitative Reasoning	Proficiency to problem-solve, troubleshoot, and interpret results, and to use statistical approaches when evaluating data.	1)MLS442 F 2)MLS463 C 3)MLS417 P 4)MLS445 P 5)MLS472 C 6)MLS443 F	Taylor Barrett Brown Weber Weber Barrett	1)Calculate and interpret values associated with the CBC and other hematology procedures. 2) Recognize how operations policies impact workflow within the laboratory. 3) Calculate and interpret values associated with TDM and other clinical chemistry procedures 4) Analyze and interpret microbiology culture test results. 5) Shows logical thinking and resourcefulness in dealing with problems. 6) Recognize and perform additional testing that is necessary to appropriately interpret serological results	MLS442 – Specific Questions on Final MLS463 – completed checklist MLS417 – Content Specific Section Quiz MLS445 – Case Study Exam MLS472 – PDE#18 MLS443 – Lab Papers Grade
	Competency to perform a full range of testing in the contemporary medical laboratory encompassing pre-analytical, analytical, and post-analytical components of laboratory services.	1)MLS442 F 2)MLS417 P 3)MLS445 P 4)MLS472 C 5)MLS443 F 6)MLS422 P	Taylor Brown Weber Weber Barrett Doty	1) Perform hematology procedures to get accurate patient and QC results. 2) Identify and quantitate TDM biomarkers on a peripheral blood sample 3) Identify, perform, and report appropriate biochemical tests for organism identification. 4) Obtains accurate and precise results. 5) Perform serological testing sufficient to identify an appropriate blood product for transfusion. 6) Perform a nucleic acid amplification	MLS442 – Practical Exam MLS417 – Module Quiz & Media Lab MLS445 – Practical Exam MLS472 – PDE#10 MLS443 – Practical Exam MLS422 – Lab 3

	Maintaining appropriate composure under stressful conditions.	1)MLS463 C 2)MLS472 C	Barrett Weber	1) Work effectively and contribute toward the productivity of the laboratory team. 2) Maintains work Quality and Quantity under stress.	MLS463 – Sim Lab MLS472 – PDE#36
	Administrative skills consistent with philosophies of quality assurance, continuous quality improvement, laboratory education, fiscal resource management.	1)MLS463 C 2)MLS472 C 3)MLS443 F 4)MLS422 P	Barrett Weber Barrett Doty	1) Apply knowledge and skills acquired during subject specific coursework to the administrative and supervisory duties conducted within the laboratory department. 2) Performs appropriate quality control/ quality assurance procedures. 3) Perform appropriate Quality Control sufficient to determine that the test system for pretransfusion testing is operational. 4) Discuss and perform quality control and quality assurance practices that are specific to a molecular testing laboratory	MLS463 – Reviewed a policy MLS472 – PDE#7 MLS443- Lab 1 Grade MLS422 – PCR contamination
	Application of safety and governmental regulations and standards as applied to medical laboratory practice.	1)MLS442 F 2)MLS463 C 3)MLS472 C	Taylor Barrett Weber	1) Adhere to established safety policies and practices 2) Adhere to established safety policies and practices to minimize injury to self and others. 3) Follows laboratory institutional safety policies	MLS442 – Safety Scenarios MLS463 – Safety training or Inspection MLS472 – PDE#3

What you Found – The data

Section 6 – Assessment Data

In this section, fill in the data for **2021-2022** academic year with: Graduation, Retention, Persistence, DFWI, Post Grad Success, Equity Gaps, PSLO, ESLO and Indirect data from external sources and/or student exit survey.

Note: Action targets for graduation, retention and DFWI are listed as previous year's University average.

Performance Criteria	Assessment Methods	Performance Target	Results	Met?																		
PSLO7-Communication/Teamwork	Assignments in Classes assessed Student exit survey	85% of students scoring B or higher 85% of students rating themselves as impacted “quite a bit” or “very much”	<table border="1"> <tr> <td>MLS463 C</td> <td>Barrett</td> <td>100%</td> </tr> <tr> <td>MLS472 C</td> <td>Weber</td> <td>100%</td> </tr> <tr> <td>MLS422 P</td> <td>Doty</td> <td>100%</td> </tr> <tr> <td>MLS417 P</td> <td>Brown</td> <td>88%</td> </tr> </table> 96%	MLS463 C	Barrett	100%	MLS472 C	Weber	100%	MLS422 P	Doty	100%	MLS417 P	Brown	88%	Yes						
MLS463 C	Barrett	100%																				
MLS472 C	Weber	100%																				
MLS422 P	Doty	100%																				
MLS417 P	Brown	88%																				
PSLO3-Ethics	Assignments in Classes assessed Student exit survey	85% of students scoring B or higher 85% of students rating themselves as impacted “quite a bit” or “very much”	<table border="1"> <tr> <td>MLS472 C</td> <td>Weber</td> <td>100%</td> </tr> <tr> <td>MLS443 P</td> <td>Barrett</td> <td>34%</td> </tr> </table> 96%	MLS472 C	Weber	100%	MLS443 P	Barrett	34%	No												
MLS472 C	Weber	100%																				
MLS443 P	Barrett	34%																				
PSLO1	Assignments in Classes assessed	85% of students scoring B or higher	<table border="1"> <tr> <td>MLS442 F</td> <td>Taylor</td> <td>97%</td> </tr> <tr> <td>MLS417 P</td> <td>Brown</td> <td>100%</td> </tr> <tr> <td>MLS445 P</td> <td>Weber</td> <td>94%</td> </tr> <tr> <td>MLS472 C</td> <td>Weber</td> <td>100%</td> </tr> <tr> <td>MLS443 F</td> <td>Barrett</td> <td>94%</td> </tr> <tr> <td>MLS422 P</td> <td>Doty</td> <td>100%</td> </tr> </table>	MLS442 F	Taylor	97%	MLS417 P	Brown	100%	MLS445 P	Weber	94%	MLS472 C	Weber	100%	MLS443 F	Barrett	94%	MLS422 P	Doty	100%	Yes
MLS442 F	Taylor	97%																				
MLS417 P	Brown	100%																				
MLS445 P	Weber	94%																				
MLS472 C	Weber	100%																				
MLS443 F	Barrett	94%																				
MLS422 P	Doty	100%																				

	Student exit survey	85% of students rating themselves as impacted “quite a bit” or “very much”	100%																			
PSLO2	Assignments in Classes assessed Student exit survey	85% of students scoring B or higher 85% of students rating themselves as impacted “quite a bit” or “very much”	<table border="1"> <tr> <td>MLS442 F</td> <td>Taylor</td> <td>75%</td> </tr> <tr> <td>MLS463 C</td> <td>Barrett</td> <td>97%</td> </tr> <tr> <td>MLS417 P</td> <td>Brown</td> <td>94%</td> </tr> <tr> <td>MLS445 P</td> <td>Weber</td> <td>89%</td> </tr> <tr> <td>MLS472 C</td> <td>Weber</td> <td>100%</td> </tr> <tr> <td>MLS443 F</td> <td>Barrett</td> <td>100%</td> </tr> </table> 100%	MLS442 F	Taylor	75%	MLS463 C	Barrett	97%	MLS417 P	Brown	94%	MLS445 P	Weber	89%	MLS472 C	Weber	100%	MLS443 F	Barrett	100%	No
MLS442 F	Taylor	75%																				
MLS463 C	Barrett	97%																				
MLS417 P	Brown	94%																				
MLS445 P	Weber	89%																				
MLS472 C	Weber	100%																				
MLS443 F	Barrett	100%																				
PSLO4	Assignments in Classes assessed Student exit survey	85% of students scoring B or higher 85% of students rating themselves as impacted “quite a bit” or “very much”	<table border="1"> <tr> <td>MLS463 C</td> <td>Barrett</td> <td>100%</td> </tr> <tr> <td>MLS472 C</td> <td>Weber</td> <td>100%</td> </tr> </table> 100%	MLS463 C	Barrett	100%	MLS472 C	Weber	100%	Yes												
MLS463 C	Barrett	100%																				
MLS472 C	Weber	100%																				
PSLO5	Assignments in Classes assessed Student exit survey	85% of students scoring B or higher 85% of students rating themselves as impacted “quite a bit” or “very much”	<table border="1"> <tr> <td>MLS463 C</td> <td>Barrett</td> <td>100%</td> </tr> <tr> <td>MLS472 C</td> <td>Weber</td> <td>100%</td> </tr> <tr> <td>MLS443 F</td> <td>Barrett</td> <td>100%</td> </tr> <tr> <td>MLS422 P</td> <td>Doty</td> <td>100%</td> </tr> </table> 100%	MLS463 C	Barrett	100%	MLS472 C	Weber	100%	MLS443 F	Barrett	100%	MLS422 P	Doty	100%	Yes						
MLS463 C	Barrett	100%																				
MLS472 C	Weber	100%																				
MLS443 F	Barrett	100%																				
MLS422 P	Doty	100%																				
PSLO6	Assignments in Classes assessed Student exit survey	85% of students scoring B or higher 85% of students rating themselves as impacted “quite a bit” or “very much”	<table border="1"> <tr> <td>MLS442 F</td> <td>Taylor</td> <td>100%</td> </tr> <tr> <td>MLS463 C</td> <td>Barrett</td> <td>77%</td> </tr> <tr> <td>MLS472 C</td> <td>Weber</td> <td>100%</td> </tr> </table> 100%	MLS442 F	Taylor	100%	MLS463 C	Barrett	77%	MLS472 C	Weber	100%	No									
MLS442 F	Taylor	100%																				
MLS463 C	Barrett	77%																				
MLS472 C	Weber	100%																				
Graduation Rate	University Dashboard	6-year rate >50%	99.2% 3 year rolling rate	Yes																		
Retention	University Dashboard	1-year rate >75%	95% 1 year	Yes																		
Certification	Accreditor’s report	1-year >75%	97%	Yes																		
Employment	Instructor contact	1-year > 70%	100%; 43% at graduation	Yes																		
DFWI	University Dashboard	All program <12%	0%	Yes																		

2022 All Course Work Data.

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

MLS442 Hem I	F	F				P	
MLS 452Hem II	P	P					
MLS 449 UA	F	P		P	P		F
MLS 424 Hemostasis	P	P		P	P	P	P
MLS 471 Externship	C	C	C	C	C	C	C
Chemistry Series							
MLS 415 Chem I	F	F					F
MLS 416 Chem II	P	P		F			P
MLS 417 Chem III	P	P					P
MLS 470 Externship	C	C	C	C	C	C	C
Foundations Series							
MLS 432 Found I		F	P	F	P	F	
MLS 462 Found II		P	P		P	P	P
MLS 463 Found III		C		C	C	C	C
Microbiology Series							
MLS 464 Parasit/Mycology	P	F					
MLS 444 Micro I	F	F			P		
MLS 445 Micro II	P	P					
MLS 472 Externship	C	C	C	C	C	C	C
Blood Bank Series							
MLS 420 Immunology	F	F					
MLS 443 BB I	F	F	F		P		
MLS 453 BB II	P	P		P		P	P
MLS 473 Externship	C	C	C	C	C	C	C
Stand Alone Courses							
MLS 422 Molecular	P				P		C

Indirect measure of individual course contribution to professional goals from class of 2021 student exit survey

#	Question	Very much	Quite a bit	Some	Very little	Total
1	MLS 415 Clinical Chemistry I	75% 21	18% 5	7% 2	0.00% 0	28
2	MLS 416 Clinical Chemistry II	71% 20	21% 6	7% 2	0% 0	28
3	MLS 417 Clinical Chemistry III	61% 17	14% 4	25% 7	0% 0	28
4	MLS 420 Clinical Immunology/ Infectious Serology	75% 21	25% 7	0% 0	0% 0	28
6	MLS 422 Molecular Diagnostic Methods	64% 18	18% 5	18% 5	0% 0	28

7	MLS 424 Hemostasis	89%	25	11%	3	0%	0	0%	0	28
8	MLS 442 Hematology I	96%	27	4%	1	0%	0	0%	0	28
9	MLS 452 Hematology II	100%	28	0%	0	0%	0	0%	0	28
10	MLS 449 Principles of Urinalysis	93%	26	7%	2	0%	0	0%	0	28
11	MLS 443: Immunohematology I	71%	20	21%	6	7%	2	0%	0	28
12	MLS 453 Immunohematology II	71%	20	21%	6	7%	2	0%	0	28
13	MLS 444 Microbiology I	68%	19	29%	8	4%	1	0%	0	28
14	MLS 445 Microbiology II	68%	19	29%	8	4%	1	0%	0	28
15	MLS 464 Mycology / Virology	57%	16	32%	9	11%	3	0%	0	28
16	MLS 474 Parasitology	68%	19	18%	5	14%	4	0%	0	28
17	MLS 432 Foundations of MLS I	61%	17	21%	6	18%	5	0%	0	28
18	MLS 462 Foundations of MLS II	54%	15	21%	6	25%	7	0%	0	28
19	MLS 463 Foundations of MLS III	57%	16	14%	4	25%	7	4%	1	28
20	MLS 470, 471, 472, 473 Externships	100%	28	0%	0	0%	0	0%	0	28

- **History of Results:** 3-years (or more) of data from previous reports on these outcomes should be looked at for trends.

Outcomes	Class of 2022 (Preliminary)	Class of 2021 *added courses	Class of 2020	Class of 2019 *Added PSLO 4	Class of 2018 *Changed direct measure of outcome	Faculty Interpretation
PSLO1	Met for: MLS442, MLS 417, MLS445, MLS472, MLS443, MLS422	Met for: MLS470, MLS474, MLS449, MLS415 Not Met for: MLS452, MLS464 Outside: 100% of student reports returned received >2 on PDE. Indirect: 100% of student responses rated Quite a bit or very much	Direct: 100% scored B or greater on BB practical and 92.3% scored B or greater on Immunology practical. Outside: 100% of student reports returned received >2 on PDE Indirect NA	Direct: 100% scored B or greater on Parasitology. 100% scored B or greater on Chem II. Outside: 100% of student reports returned received >2 on PDE Indirect: 100% of student responses rated Quite a bit or very much	Direct: 100% scored B or greater on UA final. 85% scored B or greater on Heme II Assignment Outside: 100% >2 on PDE. 78% received highest score possible. Indirect: 100% rated "Quite a bit" or "very much"	Acceptable. Foundational level courses demonstrated improvement as students progressed through the program.

PSLO2	<p>Met for: MLS463, MLS445, MLS472, MLS443, MLS417</p> <p>Not Met for: MLS442</p>	<p>Met for: MLS452, MLS470, MLS474, MLS449, MLS415</p> <p>Not Met for: MLS462, MLS464</p> <p>Outside: 100% of student reports returned received >2 on PDE.</p> <p>Indirect: 100% of student responses rated Quite a bit or very much</p>	<p>Direct: 94.9% of students scored B or greater on cases in both Parasitology and Chemistry.</p> <p>Outside: 100% of student reports returned received >2 on PDE.</p> <p>Indirect NA</p>	<p>Direct: 100% scored B or greater on UA project.</p> <p>80.4% scored B or greater on Heme project.</p> <p>Outside: 100% of student reports returned received >2 on PDE.</p> <p>Indirect: 90% of student responses rated Quite a bit or very much</p>	<p>Direct: 100% scored B or greater on Micro II project. 100% scored B or greater on Mycology project.</p> <p>Outside: 97.4% >2 on PDE. 77% received highest score possible</p> <p>Indirect: 93.8% rated "Quite a bit" or "very much"</p>	Needs Work. Teaching problem solving is still one of our greatest challenges. Utilizing coursework in assessment has been successful at identifying curricular weaknesses. Utilizing specific exam questions identified a weakness in student ability to calculate laboratory values. More work will focus on additional practice in this area through multiple subjects and in capstone simulation.
PSLO3	<p>Met for: MLS472</p> <p>Not Met for: MLS443</p>	<p>Met for: MLS470, MLS462</p> <p>Outside: 100% of student reports returned received >2 on PDE.</p> <p>Indirect: 96% of student responses rated Quite a bit or very much</p>	<p>Direct: 100% scored B or greater on Ethics project.</p> <p>Outside: 100% of student reports returned received >2 on PDE.</p> <p>Indirect NA</p>	<p>Direct: 100% scored B or greater on Ethics project.</p> <p>Outside: 100% of student reports returned received >2 on PDE.</p> <p>Indirect: 93% of student responses rated Quite a bit or very much</p>	<p>Direct: 100% scored B or greater on Ethics project</p> <p>Outside: 100% >2 on PDE</p> <p>Indirect: 84.4% rated "Quite a bit" or "very much"</p>	Needs Work. Indirect data identified that this topic wasn't perceived as a priority for this program. The program has concentrated on adding more assessments throughout the program on this topic rather than a single course work topic. This rubric will continue to be updated to include cultural competency standards.
PSLO4	<p>Met for: MLS463, MLS472</p>	<p>Met for: MLS470, MLS449</p> <p>Outside: 100% of student reports returned received >2 on PDE.</p> <p>Indirect: 100% of student responses rated Quite a bit or very much</p>	<p>Direct: unmeasured due to COVID closures.</p> <p>Outside: 97% of student reports returned received >2 on PDE.</p> <p>Indirect NA</p>	<p>Direct: Stress Test not given (no measurement)</p> <p>Outside: 100% of student reports returned received >2 on PDE.</p> <p>Indirect: 90% of student responses rated Quite a bit or very much</p>	<p>Outside: 100% >2 on PDE</p>	Acceptable. Students have demonstrated continued resiliency in laboratory practices.
PSLO5	<p>Met for: MLS463, MLS472, MLS443</p>	<p>Met for: MLS462, MLS474, MLS470, MLS462, MLS449</p> <p>Outside: 100% of student reports returned received >2 on PDE.</p> <p>Indirect: 100% of student responses rated Quite a bit or very much</p>	<p>Direct: 100% scored B or greater on QC/QA exam</p> <p>Outside: 100% of student reports returned received >2 on PDE.</p> <p>Indirect NA</p>	<p>Direct: 100% scored B or greater on Finances Quiz</p> <p>Outside: 100% of student reports returned received >2 on PDE.</p> <p>Indirect: 90% of student responses rated Quite a bit or very much</p>	<p>Direct: 93.5% scored B or greater on Education Project</p> <p>Outside: 100% >2 on PDE</p>	Acceptable. Quality continues to be a major focus of the coursework.

					Indirect: 84.4 % rated "Quite a bit" or "very much"	
PSLO6	Met for: MLS442, MLS472 Not Met for: MLS463	Met for: MLS462, MLS474, MLS470 Outside: 100% of student reports returned received >2 on PDE. Indirect: 100% of student responses rated Quite a bit or very much	Direct: 100% scored B or greater on Safety Exam Outside: 100% of student reports returned received >2 on PDE. Indirect NA	Direct: 79% received B or greater on Inspection Quiz. Outside: 100% of student reports returned received >2 on PDE. Indirect: 90% of student responses rated Quite a bit or very much	Direct: 100% received B or greater on Safety project. Outside: 100% >2 on PDE Indirect: 96.8 % rated "Quite a bit" or "very much"	Acceptable. Students learning on compliance and safety is imbedded within every course. The unmet course indicates a lack of records rather than a lack of safety practices.
PSLO7	Met for: MLS463, MLS472, MLS417	Met for: MLS462, MLS470, MLS452, MLS464 Outside: 100% of student reports returned received >2 on PDE. Indirect: 96% of student responses rated Quite a bit or very much	Direct: 83.3% received B or greater on SOP assignment. 100% scored B or greater on Molecular teach the class assignment Outside: 100% of student reports returned received >2 on PDE. Indirect: NA	Direct: 100% received B or greater on Oral Case Study and Written Validation Project. Outside: 100% of student reports returned received >2 on PDE. Indirect: 90% of student responses rated Quite a bit or very much	Direct: 97.8% received B or greater on SOP Assignment, 97.8% received B or greater on Chem II project. Outside: 100% >2 on PDE. 84% received highest score possible Indirect: 100% rated "Quite a bit" or "very much"	Acceptable. Students demonstrate both verbal and written communications skills.
Average Certification score	NA	519	530	547	529 *New BOC published	Acceptable.
Certification Rate	NA	97% total pass rate 88% first time pass rate	100% total pass rate 84% first time pass rate	95.2% total pass rate 90.5% first time pass rate	96.7% total pass rate 91.3% first time pass rate	Acceptable.
Graduation Rate	NA	100%	100%	97.6%	100%	Acceptable.
Employment	NA	100%	100%	97.6%	100%	Outstanding.
Attrition #	2/39; 1 delayed for medical, 1 delayed for family	0	1/39; 1 delayed to graduate with class of 2021	2/44; 1 dismissed during 2021, 1 left before second half	0/44	Acceptable.

- Discussion of Indirect data.

Evidence of Improvement in Student Learning

Look back on the last time you assessed these outcomes. Were plans implemented then successful?

Performance Criteria	Previous Action Plan	Previous Data	Current Data	Interpretation
Ethics	Assessing Ethics in more classes than Foundations I	100% met Found I	Met in multiple classes. Not met BB1	Assessing multiple courses allows for gaps to be identified and more creative improvements to be made.
Teamwork	Assessed by survey. Group dynamics training added to orientation.	Lack of numerical data	100% met	Still seeking a numerical data point for assessing. Students have used skills from orientation training in future group work.
Communication	Assessing Communication Directly and Indirectly	Direct - NA Indirect 83%	Direct 100% Indirect 96%	By assessing student communication work directly, student perception of learning this concept improved.
Graduation Rate	None Indicated	100%	100%	Acceptable
Retention	None Indicated	100%	99%	Acceptable
Certification	None Indicated	100%	97%	Acceptable
DFWI	None Indicated	0%	0%	Acceptable

How are you using the data? – Action

Section 7 – Data-driven Action Plans:

NWCCU’s standards for accreditation require that institutions “uses the results of its assessment efforts to inform academic and learning support planning and practices.”(1.C.7.)

Describe actions that need to be taken in the coming year.

PSLO	Current data	Previous data	Action plan															
Competency	<table border="1"> <tr> <td>MLS442 F</td> <td>Taylor</td> <td>97%</td> </tr> <tr> <td>MLS417 P</td> <td>Brown</td> <td>100%</td> </tr> <tr> <td>MLS445 P</td> <td>Weber</td> <td>94%</td> </tr> <tr> <td>MLS472 C</td> <td>Weber</td> <td>100%</td> </tr> <tr> <td>MLS443 F</td> <td>Barrett</td> <td>94%</td> </tr> </table>	MLS442 F	Taylor	97%	MLS417 P	Brown	100%	MLS445 P	Weber	94%	MLS472 C	Weber	100%	MLS443 F	Barrett	94%		None
MLS442 F	Taylor	97%																
MLS417 P	Brown	100%																
MLS445 P	Weber	94%																
MLS472 C	Weber	100%																
MLS443 F	Barrett	94%																

	MLS422 P	Doty	100%		
Problem Solving	MLS442 F MLS463 C MLS417 P MLS445 P MLS472 C MLS443 F	Taylor Barrett Brown Weber Weber Barrett	75% 97% 94% 89% 100% 100%	MLS442 76%	MLS 442 – Do more demonstration of calculations and practice problems in class. May be relying too heavily on students to self-grade exercises and seek help if needed.
Professionalism	MLS472 C MLS443 P	Weber Barrett	100% 34%	MLS443 67%	MLS 443 – Change study method assignment back to assignment from 3 years ago when students made own flash cards. Updated frequency charts in lectures to include multiple nationalities. Create new assignment grading rubric for discussion board post to include cultural competency standards published June 2022.
Stress	MLS463 C MLS472 C	Barrett Weber	100% 100%		None
Quality Assurance	MLS463 C MLS472 C MLS443 F MLS422 P	Barrett Weber Barrett Doty	100% 100% 100% 100%		None
Safety	MLS442 F MLS463 C MLS472 C	Taylor Barrett Weber	100% 77% 100%	MLS463 73%	MLS 463 – Add more opportunities for safety and compliance activities to be performed during externship. Add colors to checklist to emphasize activities' link to course outcomes.
Communication	MLS463 C MLS472 C MLS422 P	Barrett Weber Doty	100% 100% 100%		None
Certification score Passage rate	519 (12% above national average) 97% (69% national passage rate)			530 (10% above national average) 100% (75% national passage rate)	Covid-19 impacted scores similarly nationwide. Add additional BOC prep during summer term 2022 Sim lab.
Employment	100%			100%	None
Attrition	2 -Class of 2022			0 – Class of 2021	Several instances have been discussed where students might have benefitted from a decelerated version of the program (2 years instead of 1 year academic prep). Plan being developed for deceleration to be implemented 2023 or 2024 academic year.
Equity	Diversity of current cohort doesn't match Oregon State 2020 census. Students with English as second language do not pass certification exam as often as native English speaking students.				<ol style="list-style-type: none"> 1. Translating recruitment materials into Spanish 2. ASCLS Club sponsored cultural potluck to foster inclusion of multiple ethnicities within cohort. 3. Faculty seeking continuing education opportunities for providing ESL curriculum in medical sciences

- Identify other actions that need to be taken by the program.
 - Capstone course is being developed to improve instrumentation literacy and provide an opportunity for students to practice method validation. MLS 407 Capstone experience to include student projects covering method validation, development and writing of standard operating procedures, implementation of laboratory training programs and other advanced topics.
- Identify non-academic resources that need to be allocated to the action plans identified.
 - Two open faculty positions at the end of 2021-22 academic year were filled.
 - Budget allocation for reagents and supplies for MLS407 instrumentation course.
 - Facilities support for laboratory equipment (refrigerator temperatures and biohazard waste disposal)
 - Marketing contract for translation of marketing materials.
 - Identification of vendors for translation of academic materials.
 - Marketing for applicants due to lowered applicant pool
 - Faculty training on closing equity gaps.
 - IT support for website updates to support program growth in deceleration option and online option.
 - Faculty hired for MLT to MLS Online Bridge program.

Look backwards: Discuss last year's action plans.

PSLO1	PSLO2	PSLO3	PSLO4	PSLO5	PSLO6	PSLO7
PDE: Obtains accurate and precise results.	PDE: Shows logical thinking and resourcefulness in dealing with problems .	PDE: Demonstrates integrity and ethical behavior.	PDE: Maintains work Quality and Quantity under stress .	PDE: Performs appropriate quality control/ quality assurance procedures.	PDE: Follows laboratory institutional safety policies.	PDE: Receives/gives information to others effectively & courteously.
Met for: MLS470, MLS474 MLS449 MLS415 Not Met for: MLS452 MLS464	Met for: MLS452 MLS470 MLS474 MLS449 MLS415 Not Met for: MLS 462 MLS464 MLS424	Met for: MLS470 MLS462	Met for: MLS470 MLS449	Met for: MLS462 MLS474 MLS470 MLS462 MLS449	Met for: MLS462 MLS474 MLS470	Met for: MLS462 MLS470 MLS452 MLS464
Actions taken in 2021 for MLS452: New tool unknown CBC performance & final exam review 2022 data: 100% Actions taken for 2021 for MLS 464: New tool photo exam & fewer	Actions taken for 2021 for MLS 462: Schedule assignment performed in groups in person & new assignment to evaluate this outcome. 2022 data: 89% Actions taken for MLS 464: fewer organisms covered, outcome measures only cases.					

organisms covered	2022 data: 89%					
2022 data: 94%	Actions taken for MLS424: outcome measures select questions on final exam					
	2022 data: 63%					

1. Did you implement the changes you stated in previous years' program assessment report?
Yes. All changes as listed were implemented.
2. What additional changes and improvements overall did you make in your program last year?
We extended the BOC review and provided resources for faculty to attend professional development. We developed a continuing education for preceptor training for externship sites.
3. What changes in budget or resource allocations did you make in your program last year and why (i.e. new faculty, new equipment, etc.)?
We increased course fees to meet inflation and the continued development of the simulation laboratory.
4. What curriculum changes did you do in your program this last year and why?
Parasitology was included in the mycology course and virology was included in the molecular course in order to better streamline student outcomes and to align with changing methodology in industry. Credits were divided evenly amongst the courses. Research was added to Foundations II for organizational purposes.
5. What improvements do you plan this next year that will impact job success, curriculum improvements, even better alignment with industry needs and resource allocations? What data do you need to collect this next year to help support decisions for improvements you want for your program?
Bringing a guest instructor on to support faculty transition. Extending BOC review in summer. Introducing capstone class. Assessment of the capstone class and BOC exam scores should demonstrate if these changes were successful.
6. What are your greatest student success and achievement stories that you have had in the last year?
Our placement rate was significantly high last year. Within three months of graduation all students had positions in industry. Our BOC exam scores held steady above average even through remote learning. Faculty presented at national and regional conferences. We facilitated multiple student led presentations for recruitment at local high schools. Our students received 2 out of 18 competitive national professional scholarships.

Section 8 – Closing the Loop: Reflection on previous work

NWCCU's standards for accreditation require that institutions provide evidence of "continuous improvement of student learning." (1.C.7.)

- **Improvements in Assessment Process:** What improvements will be made to the assessment process? What indicated that this change should be made? How will they yield better, more actionable information?
Faculty have made efforts to more clearly understand the definitions of ISLOs and how the curriculum will align with that. Much effort has been put into understanding and implementing Global Diversity and Cultural Competency within the curriculum. In the coming year faculty will be exploring Canvas tools to better collect the data.
- **Faculty Discussion:** Summarize takeaways from all data in this report regarding program performance. How, when, to who were results presented discussed by program faculty? May include meeting minutes from when faculty evaluated assessment data and other meetings where assessment data were presented in the appendix.
The report is finalized in faculty meetings in fall term. Results are published to the national accrediting agency NAACLS annually. Results are presented to the OIT/OHSU MLS Program Advisory board in Spring and published on the OIT/OHSU MLS program webpage for prospective students.

Program Assessment Report Feedback

2020-21 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 to cover all PSLO and ISLO	
Actions taken by programs on assessment during each year of the cycle are specified	
During collection year, courses/assignments are specified that align to PSLO at FP&C levels	
Rubric: Criteria for grading the assignment is described (appendix)	
Sample: Number of samples reviewed is specified	
Reliability: Reviewer and locations of the assignment are specified	
Performance Targets of acceptability are indicated	
Results include: Graduation, Retention, Persistence, DFWI, Post Grad Success, Equity Gaps, PSLO, ISLO	
Interpretation: Current results are compared against performance targets	
Interpretation: Current results are compared against previous 3 years of data	
Interpretation: Current results are compared against University data	
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 budgetary decisions	
Faculty discuss trends in the data	
Faculty discuss previous action plan success given new data	
Faculty discuss the assessment process and make any improvements necessary	