2016-17 Program Assessment Report

Medical Laboratory Science B.S.

Mission, Objectives & Learning Outcomes

Oregon Tech Mission
Oregon Institute of Technology, an Oregon public university, offers innovative and rigorous applied degree programs in the areas of engineering, engineering technologies, health technologies, management, and the arts and sciences. To foster student and graduate success, the university provides an intimate, hands-on learning environment, focusing on application of theory to practice. Oregon Tech offers statewide educational opportunities for the emerging needs of Oregonians and provides information and technical expertise to state, national and international constituents.

Core Theme 1: Applied Degree Programs
Oregon Tech offers innovative and rigorous applied degree programs. The teaching and learning model at Oregon Tech prepares students to apply the knowledge gained in the classroom to the workplace.

Core Theme 2: Student and Graduate Success
Oregon Tech fosters student and graduate success by providing an intimate, hands-on learning environment, which focuses on application of theory to practice. The teaching and support services facilitate students' personal and academic development.

Core Theme 3: Statewide Educational Opportunities
Oregon Tech offers statewide educational opportunities for the emerging needs of Oregon's citizens. To accomplish this, Oregon Tech provides innovative and rigorous applied degree programs to students across the state of Oregon, including high-school programs, online degree programs, and partnership agreements with community colleges and universities.

So there were no changes made to these outcomes and objectives.

Showcase Learning Opportunities
Student memberships available in professional organizations - American Society for Clinical Pathology (ASCP) and American Society for Clinical Laboratory Science (ASCLS).

Opportunities to attend the following regional and national conferences:

- Northwest Medical Laboratory Symposium
- ASCLS state (Oregon and Washington) and national conferences
- Opportunity to be the Oregon student representative to the national meeting
- ASCP national conference

Students can choose to participate in teaching a college level course, MLS 107 Medical Detectives, to high school students in the High School Transition (HST) summer program. This is a hands-on career exploration course that is developed and taught by current MLS students under the direction of MLS faculty. This allows students to (e)-5.78c3.9 (c.ixmA001 Tc -0..(h)-0.6 (e)-5.8hi)-1.6 (e)-5.8ish..(h)-0.1 Tffy (i)-1.5 (o)-4.1 (n

national board certification examination* and to pursue career opportunities in various laboratory settings including but not limited to medical, research, and public health.

*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.

Meeting with Advisory Board
Program faculty held a meeting with their Advisory Board during the academic year.

Advisory Board Review
The Advisory Board reviewed the Program Mission and Objectives during the academic year.

Advisory Board Meeting took place on Monday, May 8, 2017 at 1:00-5:00 PM.

Please see meeting minutes attached for discussion notes.

Faculty discussed the things brought up at the advisory meeting at our Department Retreat, Thursday, August 17, 2017. The comments and actions follow.

Feedback on Student Externship Performance:

Lab managers like the competency checklists. We will continue to use those for each externship rotation.

Pipetting skills and knowledge of common tools. Caroline (Foundations I) and Ryan (Immunology and Chemistry) will try to incorporate more pipetting practice and exerci

MLT to MLS online program- This is part of our department strategic plan. Once we are at full faculty again we will be actively putting in place plans to start an online degree completion program.

CLIA- This is currently introduced in both the Foundations series and Clinical Chemistry series.

Critical Thinking- It is our goal to get our students to this point. We will continue to stress this in our courses. It is difficult for students to know how to troubleshoot an instrument when they have not been exposed to that instrument. It is not feasible for us to have all of the instrumentation they will encounter in the medical laboratory on campus. We rely on our clinical affiliates to introduce students to this technology. We will continue to introduce instrumentation in student labs, where feasible and appropriate. We will continue to make sure students are taught the foundational information that is needed to learn how to operate and then troubleshoot laboratory instrumentation. s( )Tj37-075 (e19.011d)Tj.2 (e)0.wed

opportunity to succeed. Students come to rely not only on faculty, but on each other to help them make it through this rigorous program.

The NAACLS benchmark for accredited programs is three consecutive years demonstrating an average of at least 70% of students who have begun the final half of the program go on to successfully graduate from the program.

Attachment 2_Graduates_10_Year_History_by_Major

Employment Rates and Salaries
The following data is from the Graduate Exit Survey and the MLS program keeping track of students' employment placement.

NAACLS requires MLS programs to report yearly average placement rates of students who found employment in the field/ closely related field or who are continuing their education within one year of graduation. They do not include students for which we do NOT have information on or those that choose to not look for employment in the field. The NAACLS benchmark for accredited programs is three consecutive years demonstrating an average of at least 70% of graduates either find employment in the field/ closely related field or continue their education within one year of graduation

Recently, most of our students have jobs within 3 months of graduation. For example, the Class of 2016 graduated in December 2016. Of the 47 students that graduated, 28 of them had jobs at graduation. By mid-February 44 of the 47 had jobs. Currently 46 of the 47 have jobs and one had decided not to enter the field.

Academic Year	**Student Reported Placement Rate within 1**
Class of	**year of Graduation**

- **2010 to September 2017**
- First time pass rate = 92.5%
- Total pass rate= 96.4%

Results of Board or Licensure Exam

education, fiscal resource management, and appropriate composure under stressful conditions.			II (Fiscal management)		
OIT-BMLS 2016-17.5 Application of safety and governmental regulations and standards as applied to medical laboratory practice.	Student Exit Survey	Student Exit Survey Extern PDE	Student Exit Survey Extern PDE MLS 462 Found II (Gov't Regs)	Student Exit Survey Extern PDE MLS 432 Found I (Safety)	Student Exit Survey Extern PDE MLS 462 Found II (Gov't Regs)
OIT-BMLS 2016-17.6 Effective communication skill to ensure accurate and appropriate information transfer.	Student Exit Survey Oral MLS 416 Written MLS 449	Student Exit Survey Extern PDE MLS courses Oral Written	Student Exit Survey Extern PDE MLS courses Oral Written	Student Exit Survey Extern PDE MLS courses Oral Written	Student Exit Survey Extern PDE MLS courses Oral Written

Assessment Map & Measure

F – Foundation – introduction of the learning outcome, typically at the lower-division level,
P – Practicing – reinforcement and elaboration of the learning outcome, or
C – Capstone – demonstration of the learning outcome at the target level for the degree

For each outcome, programs should identify at least 2 direct measures (student work that provides evidence of their knowledge and skills), and 1 indirect measure (student self-assessment of their knowledge and skills) for each outcome.

For every program, data from the Student Exit Survey will be an indirect measure at the capstone level.

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OIT-BMLS 2016-17.1 Competency to perform a full range of testing in the contemporary medical

Criterion	When asked how their OIT experience has contributed to this outcome, 90% of graduates list “Very Much” or “Quite a Bit”

OIT-

Analysis of Results

OIT-BMLS 2016-17.1 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 hematology, chemistry, microbiology, urinalysis, body fluids, molecular diagnostics, phlebotomy, and immunohematology.

Improvement Narrative - Assessment Method Change: The MLS program is a professional program. Most students transfer into the program as post-baccalaureate students or as seniors from other universities. Since many of their