Oregon Tech ▪ Oregon Health & Science University
Medical Laboratory Science Program Student Handbook

2021-22

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A Brief Message from the MLS Faculty

We are pleased to welcome you Class of 2022! The Program has a distinguished history of excellence in teaching and a proud legacy of preparing its students for the dynamic and demanding work in the contemporary medical laboratory environment.

Each member of the faculty is excited that you have chosen to embark on this journey toward a meaningful career as a Medical Laboratory Scientist. You are here because you have demonstrated the personal attributes and scholarly abilities to meet the challenges of this rigorous program of study. Rest assured we are committed to working with you to meet your academic and professional goals.

We look forward to having each of you counted among the many caring and competent graduates of the program who are the Medical Laboratory Science workforce in demand!

Preface

This Program Handbook serves as the user's source of policy and procedure information specific to the Oregon Tech • OHSU Medical Laboratory Science program. Additionally, program students will find that it complements the information in the *Oregon Tech 2021-22 General Catalog* http://www.oit.edu/registrar/registration/catalog, the *Oregon Tech Portland Metro Student Services Website https://www.oit.edu/portland-metro/student-services , Oregon Tech Policies and Procedures* https://www.oit.edu/student-affairs/student-resources and the OHSU Code of Conduct http://www.ohsu.edu/xd/about/services/integrity/policies/coc.cfm. Each student is strongly encouraged to stay informed about program policies and procedures by frequently referring to the program handbook and these sponsor institutions' resources.

Every effort is made to ensure the accuracy and currency of the information contained in this handbook. Nevertheless, the Program reserves the right to make changes at any time as circumstances warrant, including those required by legal contract obligations or mandates of our sponsoring institutions and/or our accrediting agency. When changes occur, students and affected parties will be informed in as expedient a manner as possible.

It is the policy of OIT and OHSU that all persons shall be treated equally and fairly, and an environment free of illegal discrimination and harassment shall be maintained. The Universities expressly prohibit discrimination based on race, color, gender, marital status, national origin, age, disability, religion, pregnancy, sexual orientation, gender identity or expression, or any other consideration not directly and substantively related to effective performance, and in compliance with all relevant federal, state and local laws and regulations. This commitment includes promoting discourse and activity which seeks to enhance campus diversity, and which mirrors the pluralism of our society; ensuring prompt and impartial consideration of any discrimination complaint; and equitably resolving any such complaint found to have merit.

The nationally accredited Oregon Tech • OHSU Medical Laboratory Science program is an admission-limited course of study leading to a baccalaureate of science degree. Those who complete the program are eligible to take the Medical Laboratory Scientist (MLS) certification examination administered through the American Society for Clinical Pathology (ASCP) Board of Certification (BOC). The granting of the BS degree is not contingent upon a student passing the ASCP BOC certification exam or any type of licensure examination.

The Oregon Tech ● OHSU MLS Program staff welcomes and encourages feedback regarding all aspects of program operations. A number of mechanisms are used to insure continuous and systematic review of program effectiveness and to guide ongoing curriculum development and program improvement. Program assessment includes but is not limited to:

- ✓ Surveys of students, employers and alumni
- ✓ Faculty and course evaluations
- ✓ Graduate exit interviews and certification exam results
- ✓ Graduation and program attrition data
- ✓ Advisory Board Meetings
- ✓ Student and faculty achievements (e.g., job placement, publications, presentations)
- ✓ Participation in national surveys and annual NAACLS reports

SECTION I PROGRAM ATTRIBUTES

PROGRAM SPONSORSHIP

Established in 1933 by the Oregon Health and Science University (OHSU) in Portland, Oregon, the nationally accredited Medical Laboratory Science (MLS) program is a university-based, 3+1 or 4+1 program of study culminating in a BS in Medical Laboratory Science. In 2001, administrative responsibilities for the program transferred to Oregon Tech through a master collaboration agreement between the two universities. Student diplomas identify both Oregon Tech and OHSU as the degree-granting institutions.

Today, the program is administered through the Medical Laboratory Science Department which resides on the Oregon Tech Portland-Metro campus. Here, students admitted to the last year of the degree program (professional year) take coursework that combines a rigorous competency-based medical laboratory science curriculum with community-sponsored clinical training.

Oregon Tech Division of Health Sciences • Department of Medical Laboratory Science

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Administration

1. Dr. Nagi Naganathan
   President, Oregon Tech
2. Dr. Joanna Mott
   Provost and Vice President of Academic Affairs
3. Dr. Abdollah Afjeh
   Associate Provost of Research and Academic Affairs- Portland Metro Campus
4. Dan Peterson
   Dean of Health Arts and Sciences (HAS)
5. Dawn Taylor
   Department Chair and MLS Program Director
6. Deb Disko
   Division Programs' Representative

MLS Faculty

1. Rachelle Barrette, BS, MLS(ASCP)SBB ● Instructor
   Immunohematology I & II, Foundations of MLS II & III, Immunohematology Externship
2. Ryan Brown, MS, MLS (ASCP) ● Assistant Professor
   Clinical Chemistry I, II, & III, Clinical Immunology, Chemistry/Immunology Externship
3. Caroline Doty, MS, MLS(ASCP)^{CM} ● Associate Professor
   Foundations of MLS I, Urinalysis, Molecular Diagnostic Methods, Virology, Clinical Externship Coordinator
4. Dawn Taylor, EdM, MT(ASCP) ● Associate Professor
   Hematology I & II, Hemostasis, Hematology Externship
5. Kristen Weber, MS, MT(ASCP) ● Instructor
   Medical Mycology & Parasitology, Microbiology I & II, Microbiology Externship

NOTE: The program may use guest lecturers and adjuncts when appropriate.

Oregon Tech • Oregon Health & Science University
Medical Laboratory Science Program
27500 SW Park Avenue • Wilsonville, Oregon 97070
TEL: (503) 821 - 1146 • FAX: (503) 218 - 1126
https://www.oit.edu/academics/degrees/medical-laboratory-science

PROGRAM DESCRIPTION

The nationally accredited Medical Laboratory Science program, jointly offered by Oregon Tech • OHSU, is the admission-limited, fourth-year course of study leading to a baccalaureate of science degree. Program students take coursework that combines a competency-based science curriculum with a community-partnered clinical externship.

Accreditation: National Accrediting Agency for Clinical Laboratory Sciences
5600 North River Road • Suite 720 • Rosemont, Illinois 60018
TEL: (773) 714-8880 • FAX: (773) 714-8886 http://www.naacls.org

Faculty & Staff Commitment

We, the faculty, and staff of the Oregon Tech • OHSU MLS program, as professionals and educators, are committed to providing our students with experiences that prepare them to practice as scholastically accomplished and professionally competent Medical Laboratory Scientists. To that end, we acknowledge our responsibility and pledge our commitment to:

1. Demonstrate professionalism through our words and actions
2. Provide knowledge-building, skill-developing experiences for all our students
3. Create equal opportunity learning environments within which all our students are educated in an atmosphere of fairness and impartiality
4. Foster students' commitment to lifelong learning
5. Endorse student participation in professional organizations
6. Promote student scholarship and professional achievement
7. Contribute to the ongoing development and growth of medical laboratory science pedagogy through faculty participation in scholarship, service, and outreach

Program Vision

Medical laboratory science is continually undergoing change, transformed by scientific discovery, technological innovation, and increased regulatory control of medical science. Driven by 21st century global socioeconomic realities, medical laboratory science continues to adapt practice improvements focused on appropriate lab utilization and improved quality patient care. With an eye toward the future and to remain successful in the dynamic field of laboratory medicine, medical laboratories seek out well educated and highly skilled medical laboratorians.
The Oregon Tech • OHSU MLS program intends to remain in the forefront of medical laboratory science education through ongoing program development based on the continuous and systematic review of program effectiveness that integrates feedback from students, alumni, faculty, and employers.

Our vision is that the Oregon Tech • OHSU MLS program continues as a center of excellence in medical laboratory science education, graduating an MLS workforce in demand.

Program Mission Statement

The mission of the Oregon Tech • OHSU Medical Laboratory 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 Goals

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. Identify, establish, and maintain partnerships with community medical laboratories that provide exceptional educational experiences
3. Provide learning experiences that maximize every student's potential to achieve MLS career entry-level competencies
4. Graduate competent MLS that meet the workforce needs of Oregon, the region and underserved areas throughout the nation
5. Contribute to the advancement of MLS pedagogy and growth of the profession

Essential Requirements

The Oregon Tech • OHSU MLS program has established *non-academic standards* of performance defined as *essential requirements*. These essential requirements are in accordance with the Americans with Disabilities Act (PL101-336) and the standards of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).
Through their professional conduct, students represent Oregon Tech, OHSU, the MLS profession and, specifically, the MLS Program. Additionally, MLS program students must possess knowledge, skills, attitudes, and judgment to work in a wide-ranging variety of settings where laboratory testing is performed. Consequently, to be admitted and maintain enrollment, participate in, and successfully complete the Oregon Tech • OHSU MLS program, **a student must meet these non-academic standards of performance:**

Expectations of Mastery and Skill in Information Acquisition and Communication

A. Students must demonstrate the ability to acquire and to communicate information. Specifically, a program student must be able to:

   1. Read for comprehension and follow verbal and written instructions to demonstrate mastery of information presented in coursework, including relevant content in basic science and clinical courses, at a level deemed appropriate by the faculty.
   2. Effectively communicate in written and spoken English in order to transmit information to faculty, staff, peers, and members of the healthcare team.
   3. Make a correct judgment in seeking supervisory help and consultation in a timely manner.
   4. Competently utilize technology to research, investigate, acquire, and present information obtained by observation and experimentation.
   5. Use strategies that minimize miscommunication.
   6. At all times and in all circumstances, follow established procedures to safeguard protected patient information communicated by non-electronic and electronic means.

Expectation of Motor and Sensory Functions

B. Students must demonstrate sufficient motor and sensory function to execute movements required to carry out work assignments in all phases of diagnostic testing, including pre-analytical, analytical, and post-analytical. Specifically, a program student must be able to:

1. Distinguish physical and/or chemical attributes, including color, shape, size, and fine detail of objects both macroscopically and microscopically.
2. Demonstrate sufficient dexterity to safely manipulate specimens, laboratory utensils, tools, equipment, and instrumentation including computer touchscreens, keyboards and handheld calculators, necessary to obtain and report complete and accurate diagnostic test results.
3. Demonstrate adequate mobility to attend to duties in the various locations of the medical laboratory work environment.
4. Use sensory skills to acquire and apply information presented by various means and media, including demonstrations.
5. Perform sustained, often repetitive physical activity that may require sitting, standing and/or walking for prolonged periods of time.
6. Accurately read, record, and when necessary, respond to numbers, letters and symbols displayed in print whether transmitted through non-electronic, electronic, or other technological media.
7. Demonstrate proficiency performing a wide range of tests in areas of the contemporary medical laboratory including but not limited to immunology, hematology, clinical chemistry, immunohematology, microbiology, molecular, hemostasis, urinalysis, body fluids, parasitology, mycology, virology, and other emerging diagnostic venues.

Expectations of Professionalism

C. Students must project an image of professionalism through behavior, speech, and grooming. Each student is to possess requisite knowledge and skill and safely perform a wide variety of test procedures with precision and accuracy. Specifically, a program student must be able to:

1. Follow established laboratory safety protocols when working with various sample types including blood, urine, and other body fluids and tissues, and with microbial organisms that may be infectious, and hazardous chemicals.
2. Work accurately and safely under high stress and time constraints to make subjective evaluations and decisions when mistakes may have a negative and/or high impact on patient care.
3. Adapt to changing environments, maintain a professional demeanor and concentration in distracting situations.
4. Demonstrate attributes that include integrity, responsibility, and tolerance.
5. Speak, act, and perform all work in an ethical manner as defined by the ASCLS professional code of ethics. (see page 20)
6. Show respect for self and others.
7. Work independently as well as cooperatively with others, performing professional obligations in a timely, responsible manner.
8. Prioritize tasks and accept responsibility for work performed independently and as a team member.
9. Assess his or her performance, willingly accept criticism, and actively seek ways to improve.

Program Student Learning Outcomes (PSLOs)

Seven measurable program specific learning outcomes have been defined that encompass both the university standards (Communication, Inquiry & Analysis, Ethical reasoning, Teamwork, Quantitative Literacy and Diverse perspectives) and the educational objectives of the MLS program.

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 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.
4. Maintaining appropriate composure under stressful conditions.
5. Administrative skills consistent with philosophies of quality assurance, continuous quality improvement
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.

Program Educational Objectives (Graduates' Career Entry Competencies*)

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.

(*Modified from the NAACLS Guide to Accreditation, "Description of Career Entry of the Clinical Laboratory Scientist" and "Curricular Requirements" 2008 and 2011.)

CLINICAL AFFILIATES	
Adventist Health System	Providence Seaside Hospital, Seaside, Oregon
Adventist Medical Center, Portland Oregon	Providence St. Peter Hospital, Olympia, WA
Tillamook Regional Medical Center, Tillamook, Oregon	Providence St. Vincent Medical Center, Portland, Oregon
Asante Health System	Providence Willamette Falls Medical Center, Oregon City, Oregon
Rogue Valley Medical Center, Medford, Oregon	**Renown Medical Center**, Reno, Nevada
Three Rivers Community Hospital, Grants Pass, Oregon	**Saint Alphonsus System**
Bay Area Hospital, Coos Bay, Oregon	SA Regional Medical Center, Boise, Idaho
Bonner General Hospital, Sandpoint, Idaho	SA Medical Center- Baker City, Baker City, Oregon
Clinical Labs of Hawaii, Aiea, Hawaii	SA Medical Center – Nampa, Nampa, Idaho
Columbia Memorial Hospital, Astoria, Oregon	SA Medical Center – Ontario, Ontario, Oregon
Corvallis Clinic, Corvallis, Oregon	**St. Charles Health System-**
Curry General Hospital, Gold Beach, Oregon	St. Charles Medical Center- Bend
Foundation Health, Fairbanks, Alaska	St. Charles Medical Center - Madras
Grand Ronde Hospital, La Grande, Oregon	St. Charles Medical Center- Prineville
Interpath Laboratory, Pendleton, Oregon	St. Charles Medical Center - Redmond
Johnson County Healthcare Center, Buffalo, Wyoming	**St. Mary's Regional Medical Center,** Reno, Nevada
Kaiser Regional Laboratory, Portland, Oregon	**Sisters of Charity of Leavenworth Health System**
Kootenai Health, Coeur d'Alene, Idaho	Good Samaritan Medical Center, Lafayette, Colorado
Legacy Health System	**Salem Clinic,** Salem, Oregon
Emanuel Medical Center, Portland, Oregon	**Salem Health**
Good Samaritan Medical Center, Portland, Oregon	Salem Hospital, Salem, Oregon
Laboratory Central, Portland, Oregon	West Valley Hospital, Dallas, OR
Meridian Park Medical Center, Tualatin, Oregon	**Samaritan Health Services**
Mt. Hood Medical Center, Gresham, Oregon	Albany General Hospital, Albany, Oregon
Salmon Creek Hospital, Vancouver, Washington	Good Samaritan Regional Medical Center, Corvallis, OR
Silverton Hospital, Silverton, Oregon	Lebanon Community Hospital, Lebanon, OR
Mercy Medical Center, Roseburg, Oregon	**Santiam Hospital**, Stayton, Oregon
Mid-Columbia Medical Center, The Dalles, Oregon	**Sky Lakes Regional Medical Center**, Klamath Falls, Oregon
Northern Nevada Medical Center, Sparks, Nevada	**Tuality Community Hospital**, Hillsboro, Oregon
Oregon Health & Science University, Portland, Oregon	**University of Colorado Hospital Authority,** Aurora, Colorado
PeaceHealth	**Vancouver Clinic**, Vancouver, WA
Riverbend, Springfield, Oregon	**Veteran's Healthcare Administration**
Southwest Medical Center, Vancouver, Washington	VA Portland Healthcare System, Portland, OR
St. John Medical Center, Longview, Washington	VA Roseburg Healthcare System, Roseburg, OR
Providence Health System	Boise VA Medical Center, Boise, Idaho
Providence Hood River Memorial Hospital, Hood River, Oregon	Southern Arizona VA, Tucson, Arizona
Providence Medford Medical Center, Medford, Oregon	**Wallowa Memorial Hospital**
Providence Newberg Medical Center, Newberg, Oregon	**Willamette Valley Medical Center**, McMinnville, Oregon
Providence Portland Medical Center/ Regional Lab, Portland, Oregon	

SECTION II PROGRAM SPECIFIC POLICIES AND PROCEDURES

APPLICATION AND ADMISSION

Through an application process, program students are selected to enter the last year of the BS-degree program of study or *the professional program*. The Oregon Tech • OHSU MLS program admits one cohort of no more than 36 students per year. The start date for the program corresponds to the start of the Oregon Tech academic year or f*all term.* Students may submit completed applications anytime between October 1 and January 15th of the year proceeding the fall term for which an applicant seeks program admission.

Application for students, applying to Oregon Tech • OHSU MLS program, is a two-step process. Students must be accepted to Oregon Tech and be accepted into the MLS professional program. Prospective students should contact the Oregon Tech • OHSU MLS program office for instructions. Contact Deb Disko, program representative, by telephone at (503) 821-1146 or via e-mail at deb.disko@oit.edu.

Professional Program Application and Admission Requirements

Admission to the professional program is criterion-based, competitive, and decided by the program admissions committee. Admission selection is based upon scholarship, personal qualifications, recommendations from three references, and interview results. Selected candidates are interviewed in February through March and applicants selected for admission are notified in writing by the Program Director during March. To be eligible for admission, candidates for the MLS professional program must meet the following minimum eligibility requirements:

1. **Those *applicants who have earned a Baccalaureate degree*** must have completed a minimum of 95 transferable quarter credit hours to include all of the following:

    - **Mathematics:** one college-level math course. Minimum requirements are met by MATH 111 College Algebra. **Additional required math course**: Statistics
    - **Biology:** 24-quarter credit hours that must include one course each of microbiology and immunology. The microbiology coursework must include a laboratory component either integral to the course or taken separately; courses must be at the 200 level or above and not survey type. H**ighly recommended courses:** general biology, genetics, anatomy and physiology, cellular or molecular biology
    - **Chemistry**: 24-quarter credit hours of chemistry; courses must be at the 200 level or above and not survey type. **Highly recommend courses**: general chemistry, organic chemistry, biochemistry, and quantitative analysis

2. **Those *applicants who have not earned a Baccalaureate degree*** must have completed a minimum of 95 transferable quarter hours to include the prerequisites listed in 1 above and all of the following:
   - 18-quarter credit hours of Communication course work including specified course work in English composition, writing and speech (see Baccalaureate General Education Requirements described in the Oregon Tech General catalog)
   - 9-quarter credit hours of Humanities course work in topical areas such as Art, Art History or Appreciation, Music, Music History or Appreciation, English (excluding writing and speech), Linguistics, and Philosophy (no more than three credits of performance-based courses may be used in this category)
   - 12-quarter credit hours of Social Science course work in topical areas such as Anthropology, Economics, Geography, History, Political Science, Psychology, and Sociology.

Prerequisite course work does not need to be completed to apply, but official transcript(s) documenting completion of all outstanding prerequisite coursework with grades of 'C' or better must be on file with the MLS Department office before any offer of admission is finalized. The Oregon Tech Registrar's office will review each applicant's transcripts to confirm that the requirements are met. Applicants who have met **admission requirements** seven or more years prior to application to the MLS Program must complete additional academic work to qualify. This may be accomplished by:

- Completing a course in chemistry and a course in biology with a grade of C or better; courses must be at the 200-level or above and not survey type; or
- Receiving credit by examination in biochemistry and in microbiology; or
- Achieving a CLEP score of at least 50 on both the biology and chemistry examinations.

Applicants seeking transfer credit from international institutions must provide a credential evaluation from an Oregon Tech-approved credential evaluation service and must meet requirements as described in two above. Contact the Oregon Tech Office of Admissions on-line at http://www.oit.edu/admissions/international-students or by telephone 503.821.1250 or 1.800.422.2017 for additional information.

3. All applicants must have a minimum GPA of 2.5 to apply.

PROFESSIONAL PROGRAM COURSE OF STUDY

The MLS professional program is admission-restricted and 15 months (5 consecutive terms) long, beginning in September of the academic year in which a student is admitted and ending in December of the following year. Admitted students spend four consecutive quarters completing Medical Laboratory Science-specific coursework (Table 1) on the Oregon Tech Wilsonville campus. Upon successful completion of the on-campus work, students are assigned to one or more program-affiliated laboratories to complete an extended fifth term (16 weeks) of clinical training. During clinical training, students spend 40 hours per week applying knowledge and skills to perform a wide variety of testing in a contemporary, accredited medical laboratory and to further develop discipline-specific competency under supervision of clinical instructors. Currently, the Department of MLS maintains affiliations with accredited laboratories in Oregon, Washington, Nevada, Idaho, Hawaii, Colorado, Arizona, Alaska, and Wyoming.

Table 1 MLS Professional Program Curriculum Map 2021-22 (Total Credits = 84)

Fall 1st Term (18 cr)	Winter 2nd Term (20 cr)	Spring 3rd Term (17 cr)	Summer 4th Term (12 cr)	Fall 5th Term (16 cr- proposed 17 cr)
MLS 420 (5 cr) Clinical Immunology	MLS 415 (6 cr) Clinical Chemistry I	MLS 416 (6 cr) Clinical Chemistry II	MLS 417 (2 cr) Clinical Chemistry III	MLS 463 (1 cr) Foundations of MLS III
MLS 432 (4 cr) Foundations of MLS I	MLS 444 (6 cr) Microbiology I	MLS 443 (4 cr) Immunohematology I	MLS 422 (4 cr) Molecular Diagnostic Methods	MLS 470 (4 cr) Chemistry/Immunology Externship
MLS 442 (6 cr) Hematology I	MLS 452 (5 cr) Hematology II	MLS 445 (4 cr) Microbiology II	MLS 424 (3 cr) Hemostasis	MLS 471 (4 cr) Hematology Externship
MLS 464 (3 cr) Medical Mycology and Parasitology	MLS 462 (3 cr) Foundations of MLS II	MLS 449 (3 cr) Principles of Urinalysis	MLS 453 (3 cr) Immunohematology II	MLS 472 (4 cr) Microbiology Externship
				MLS 473 (3 cr – proposed 4 cr) Immunohematology Externship

Please note: This schedule may change based on faculty staffing.

MLS students are required to complete the following online OHSU Compass courses before they begin Fall term: Information Privacy and Security Essentials, Integrity Foundations and Respect at the University. These are subject to change.

OHSU IPE course will run asynchronously fall, winter and spring terms. Grades for this course will be part of MLS 463 Foundations of MLS III.

POLICY ON SELECTION AND PLACEMENT OF STUDENTS FOR CLINICAL EXTERNSHIP

The clinical externship affords the student the opportunity to perform a variety of procedures under the supervision of a certified medical laboratory scientist. Students are admitted into the Oregon Tech ● OHSU MLS Program with the understanding that they are placed for clinical training (externships) upon successful completion of on-campus coursework and after demonstrating that all essential requirements are met during the first four quarters of the program. In the unlikely event that the Program cannot place a student with an assigned clinical affiliate due to events beyond its control, the Program will work with Oregon Tech and rely upon all resources available to identify and place the student at an alternate training site and/or alternate date.

When selecting students for externship placement, every consideration is given first to the clinical affiliates' needs and preferences and second to the needs and preferences of the students. Due to the nature of contractual agreements between Oregon Tech, OHSU and clinical affiliates, the program can make no guarantee that a student will be assigned to a specific clinical training site. Consequently, students admitted to the MLS professional program are guaranteed placement for their clinical training subject to the following policies and procedures:

1. Due to the variable availability of training sites year to year and the nature of contractual agreements with affiliated training sites, student placement at a specific site and term may

not be possible. Therefore, placement of students for clinical training is determined by the program in consultation with clinical affiliate training sites.

2. Before beginning clinical training, students must comply with all training site and Oregon standardized administrative requirements (OARs) including but not limited to immunizations, screening (e.g., background check, drug screen, etc.), trainings (e.g., safety, CPR, etc.), and proof of health insurance coverage valid for the entire clinical training period. ***PLEASE NOTE:*** Some affiliates may have additional paperwork, lab work (ex: titers), immunizations etc. that will be required of students placed at that site. It is the student's responsibility to assure that these additional requirements are met prior to the start of the externship.
3. All academic and non-academic requirements and deadlines for completing OARs must be met before a clinical training assignment is made and a student is permitted to start clinical training. ***PLEASE NOTE: NO STUDENT WILL RECEIVE THEIR EXTERNSHIP PLACEMENT UNTIL ALL IMMUNIZATION AND OTHER OARs REQUIREMENTS ARE MET AND DOCUMENTATION IS SUCCESSFULLY UPLOADED TO THEIR DOCUMENT TRACKING ACCOUNT.***
4. Due to requirements made by our affiliate partners**, if a student has not been fully vaccinated against covid-19, we cannot guarantee placement in a clinical externship. This may result in the inability to graduate**. There are several clinical affiliates that are currently requiring all students within their facilities to be vaccinated. There are no exemptions given for students. Clinical affiliates have the right to change their student requirements at any time.
5. Students are solely responsible for transportation and housing needs associated with their clinical training placement.

At times, there may be difficulties or special needs (e.g., remediation) when matching clinical sites with students. If this occurs, the Program Clinical Externship Coordinator makes every reasonable effort, working with clinical affiliates to place students. Final decisions are mutually agreed upon between the clinical sites and the faculty in consultation with the clinical externship coordinator.

PROGRESS, PROMOTION, AND GRADUATION REQUIREMENTS

At a minimum, *to progress through and successfully complete the MLS program, and to be eligible to graduate* an MLS program student must meet all the following:

1. Meet all Oregon Tech graduation requirements including completing all quarter credit hours for the MLS curriculum described in the catalog for the academic year a student enters the professional program. (The minimum credits required for graduation with a BS MLS degree following the MLS curriculum map are 183 – proposed 184.)
2. Maintain a GPA of 2.0 in each of the 5 terms of the professional program
3. Achieve a final grade of "C" (75%) or better in all professional program courses.
4. Meet all *Essential Requirements* (pages 8 & 9 of this handbook) in each of the 5 quarters of the program.

Failure to meet these minimum standards will result in disciplinary action(s) that may include academic probation, remediation, and dismissal from the program.

NOTE: Graduation from this program and granting of the BS Medical Laboratory Science degree is not contingent upon passing an external certification or licensure exam.

CREDIT BY PRIOR EXPERIENTIAL LEARNING

These categories are for credit that is awarded for educational accomplishments attained outside of accredited post-secondary institutions. The university allows students to petition for credit for prior learning through the following means:

A) Credit for National Registry or Licensure Exam
This is not an applicable option for Medical Laboratory Science.

B) Credit by Examination
The university allows students to challenge courses, but it is up to the discretion of departments as to whether they allow courses to be challenged and how that is to take place. It is the decision of the MLS faculty that MLS courses with a laboratory component may not be challenged because by passing a course we are stating that a student is competent and capable of completing laboratory tasks. There is no way of evaluating this without a complete laboratory evaluation and that would put a drain on faculty and take time away from other students. Externship courses cannot be challenged. MLS courses without a laboratory component may be challenged. University procedures will be followed. https://www.oit.edu/registrar/forms

C) Credit by Portfolio
Oregon Institute of Technology recognizes that students learn outside the classroom through experiences on the job, vocational education, professional development courses, workshops, and independent study. Oregon Tech may grant credit by portfolio when the evidence provided is judged to be equivalent to college-level courses in the Oregon Tech curriculum. University procedures will be followed. https://www.oit.edu/registrar/forms

DISCIPLINARY ACTIONS

Academic Probation

With one exception*, any MLS program student will be placed on *academic probation* by the University if the student's cumulative grade-point average for any given term falls below 2.00. The student placed on academic probation will receive notification from the registrar's office and the MLS Department office that they are on probation as well as instructions on how to proceed.
*__***NOTE:***__ if a student receives a "D" or "F" in two or more MLS courses in any one of the five terms comprising the professional program, the student will be dismissed from the program.

Remediation

When an MLS program student unsuccessfully completes an MLS course, progression in the professional curriculum is curtailed. Specifically, this means that if a student fails an MLS course, they will be given the opportunity to *remediate* – ***this is a second chance opportunity***. Remediation is valid only in cases when a student fails a single MLS course in any one of the

five terms of the professional program. The type and length of remediation will be determined on a case-by-case basis by course faculty. The faculty will develop an action plan that details the remedial action(s).

In cases when a student fails an *externship course*, the repeated course shall not exceed the number of weeks, days, or time period regularly scheduled for the externship. Additionally, the student will not usually remediate at the clinical site where the unsuccessful attempt was made. Additionally, placement of a remediating student is determined by the MLS Program clinical externship coordinator in consultation with faculty and clinical affiliate training site(s) that may be available to host the remediating student.

One universal consequence in all cases of remediation is the prospect of a delay in the student's progress through and the completion of the program, and a postponement of graduation. Nevertheless, when a student must repeat an MLS course as a consequence of remedial action, the student is responsible for all tuition and fees associated with repeating said course, for meeting the University's requirements for course registration, and they must meet all University requirements for maintaining active admission status. Should a remediating student be unsuccessful in meeting the terms of the action plan for remediation, the student will be dismissed from the program.

Dismissal from the Program

Implicit in the progress through and graduation of every student from the Medical Laboratory Science Program is the faculty's endorsement that the student has demonstrated competence, behavior, and judgment deserving of public trust. Consequently, any student's academic performance or patterns of behavior that are judged by the faculty to be unacceptable and/ or egregious results in dismissal from the program. Specifically, any student is dismissed from the program (i.e., not permitted to register for program classes and not permitted to maintain program enrollment) if/when they meet any of the following criteria:

- receives a final course grade of "D" or "F" in two or more MLS courses in any one of the five terms comprising the professional program
- fails to meet the terms of an action plan for remediation, approved leave-of-absence, or admission deferment
- violates the code of conduct or ethics and/or demonstrates unacceptable behavior(s) including engaging in or demonstrating the prohibited behaviors described in Table 2
- fails to demonstrate mastery of any *essential requirement* at any time during the five terms of the MLS program
- is suspended or expelled from Oregon Tech or removed from a clinical training site for any reason other than academic performance

Acceptable Conduct/ Prohibited Conduct

An expectation of professional education is that students comply with all policies and procedures of the program, the sponsoring institutions (both Oregon Tech and OHSU), and the clinical affiliates. At a minimum, students are expected to conduct themselves in a professional manner at all times while enrolled in the program. Students are also expected to be well informed and to possess a working knowledge of their rights and responsibilities while students of both Oregon Tech and Oregon Health Science University. To that end, students are referred to the following resources:

1. Oregon Tech Student Rights and Responsibilities https://www.oit.edu/campus-life/student-affairs/student-resources
2. Oregon Health Science University Integrity Program, Code of Conduct https://www.ohsu.edu/integrity-department/code-conduct

Oregon Tech and OHSU have the right and responsibility to sever the relationship with any student whose behavior and/or lack of professionalism makes them unfit for a career in the health-related professions. Specific examples of prohibited conduct are listed in Table 2 (page 20). When any student's behavior consistently violates program policies and procedures, or a student's behavior demonstrates ***a pattern of willful neglect*** of program policies and procedures, or a student engages in prohibited conduct (Table 2), the student will be dismissed from the program.

Table 2
Prohibited Conduct

• Submitting material in assignments, examinations or other academic work that is based upon sources prohibited by the instructor, or furnishing materials to another person for the purposes of aiding that person to cheat
• Submitting material in assignments, examinations and other academic work that is fabricated, or is not the work of the student in question, and where there is no indication (citation) in writing that the work is not that of the student
• Knowingly producing false evidence or false statements, making charges in bad faith against any other person, or making false statements about one's own behavior related to educational or professional matters
• Falsification or misuse of university records, permits, or documents.
• Violating existing Program or institution policies or regulations relating to non-academic matters
• Exhibiting behavior that is disruptive to the learning process or to the academic or community environment
• Conviction of a crime before becoming a student under circumstances bearing on the suitability of a student to practice a health or related profession or while a student in the MLS Program
• Disregard for the ethical standards appropriate to the practice of a health or related profession while a student
• Habitual or excessive use of intoxicants or illegal drugs
• Obstruction or disruption of teaching, research, administration, disciplinary procedures, or other institutional activities including the institution's public service functions or other authorized activities on institutionally owned or controlled property
• Obstruction or disruption interfering with freedom of movement, either pedestrian or vehicular, on institutionally owned or controlled property.
• Possession or use of firearms, explosives, dangerous chemicals or other dangerous weapons or instruments on institutionally owned or controlled property, in contravention of law or institutional rules.
• Detention or physical abuse of any person, or conduct intended to threaten imminent bodily harm or endanger the health of any person on any institutionally owned or controlled property

• Malicious damage, misuse, or theft of institutional property, or the property of any other person where such property is located on institutionally owned or controlled property or, regardless of location, is in the care, custody, or control of the institution.
• Refusal by any person while on institutional property to comply with an order of any appropriate authorized official to leave such premises because of conduct proscribed by this rule when such conduct constitutes a danger to personal safety, property, or educational or other appropriate institutional activities on such premises.
• Unauthorized entry to or use of institutional facilities including buildings, and grounds.
• Illegal use, possession, or distribution of drugs on institutionally owned or controlled property.
• Inciting others to engage in any of the conduct or to perform any of the acts prohibited herein. Inciting means advocacy of proscribed conduct, which calls upon a person, or persons addressed for imminent action, and are coupled with a reasonable apprehension of imminent danger to the functions and purposes of the institution, including the safety of persons and the protection of its property.

ASCLS Professional Code of Ethics

Preamble

The Code of Ethics of the American Society for Clinical Laboratory Science sets forth the principles and standards by which Medical Laboratory Professionals and students admitted to professional education programs practice their profession.

I. Duty to the Patient

Medical Laboratory Professionals' primary duty is to the patient, placing the welfare of the patient above their own needs and desires and ensuring that each patient receives the highest quality of care according to current standards of practice. High quality laboratory services are safe, effective, efficient, timely, equitable, and patient-centered. Medical Laboratory Professionals work with all patients and all patient samples without regard to disease state, ethnicity, race, religion, or sexual orientation. Medical Laboratory Professionals prevent and avoid conflicts of interest that undermine the best interests of patients.

Medical Laboratory Professionals are accountable for the quality and integrity of the laboratory services they provide. This obligation includes maintaining the highest level of individual competence as patient needs change, yet practicing within the limits of their level of practice. Medical Laboratory Professionals exercise sound judgment in all aspects of laboratory services they provide. Furthermore, Medical Laboratory Professionals safeguard patients from others' incompetent or illegal practice through identification and appropriate reporting of instances where the integrity and high quality of laboratory services have been breached.

Medical Laboratory Professionals maintain strict confidentiality of patient information and test results. They safeguard the dignity and privacy of patients and provide accurate information to patients and other health care professionals. Medical Laboratory Professionals respect patients' rights to make decisions regarding their own medical care.

II. Duty to Colleagues and the Profession

Medical Laboratory Professionals uphold the dignity and respect of the profession and maintain a reputation of honesty, integrity, competence, and reliability. Medical Laboratory Professionals contribute to the advancement of the profession by improving and disseminating the body of knowledge, adopting scientific advances that benefit the patient, maintaining high standards of practice and education, and seeking fair socioeconomic working conditions for members of the profession.

Medical Laboratory Professionals accept the responsibility to establish the qualifications for entry to the profession, to implement those qualifications through participation in licensing and certification programs, to uphold those qualifications in hiring practices, and to recruit and educate students in accredited programs to achieve those qualifications.

Medical Laboratory Professionals establish cooperative, honest, and respectful working relationships within the clinical laboratory and with all members of the healthcare team with the primary objective of ensuring a high standard of care for the patients they serve.

III. Duty to Society

As practitioners of an autonomous profession, Medical Laboratory Professionals have the responsibility to contribute from their sphere of professional competence to the general wellbeing of society. Medical Laboratory Professionals serve as patient advocates. They apply their expertise to improve patient healthcare outcomes by eliminating barriers to access to laboratory services and promoting equitable distribution of healthcare resources.

Medical Laboratory Professionals comply with relevant laws and regulations pertaining to the practice of Clinical Laboratory Science and actively seek, to change those laws and regulations that do not meet the high standards of care and practice.

Pledge to the Profession

As a Medical Laboratory Professional, I pledge to uphold my duty to Patients, the Profession and Society by:

- Placing patients' welfare above my own needs and desires.
- Ensuring that each patient receives care that is safe, effective, efficient, timely, equitable and patient-centered.
- Maintaining the dignity and respect for my profession.
- Promoting the advancement of my profession.
- Ensuring collegial relationships within the clinical laboratory and with other patient care providers.
- Improving access to laboratory services.
- Promoting equitable distribution of healthcare resources.
- Complying with laws and regulations and protecting patients from others' incompetent or illegal practice
- Changing conditions where necessary to advance the best interests of patients.

STUDENT PROGRESS

MLS Program's Progress and Promotions Committee (PPC)

Fulltime faculty comprise the PPC committee which meets at least 4 times per academic calendar year, generally just before the end of each academic quarter. During these meetings, the committee reviews students' progress and promotion in the program. Additional committee meetings are scheduled on an "as needed" basis.

- Criteria for student promotion
  To be promoted, a student must receive passing grades (this includes "I" and "IP" grades when applicable) in all attempted courses, and demonstrate satisfactory professional development as demonstrated on MLS Professional Development. Student promotion from one quarter to the next will be automatic unless they fail to meet academic and/or professional MLS program standards, or the student is re-entering the program following an authorized leave of absence.
- Recommendation for graduation
  To be recommended for graduation with a BS in Medical Laboratory Science, a Program student must: a) successfully file a graduation check form with the Oregon Tech Registrar's Office; b) meet all degree requirements, and c) demonstrate satisfactory professional qualifications as determined by program faculty.

Activities Not Within the Jurisdiction of the Progress and Promotions Committee

Any program student will be placed on academic probation by the Oregon Tech Academic Progress & Petitions Committee for sufficient cause. This does not require input by the MLS Program PPC, though the committee may be informed of the action taken by the University. Additionally, in extraordinary circumstances a student may be granted a leave of absence by the University, or the student may choose to withdraw from the University. In either case, a review by the Progress and Promotions Committee is not required, though the Program PPC may receive a courtesy notice from the University and/or the student.

Leave of Absence and Program Admission Deferment

The MLS professional program is admission-restricted and 15 months (5 consecutive terms) long, beginning in September of the academic year in which a student is admitted and ending in December of the following year. Admitted students spend four quarters completing Medical Laboratory Science-specific coursework on the Oregon Tech Portland-Metro campus. Upon successful completion of the on-campus work, students are assigned to one or more program-affiliated laboratories to complete an extended fifth term (15 weeks) of clinical training. This externship includes a 2 week on campus simulation lab. During clinical training, students spend 40-hours per week in assigned medical laboratories in Oregon, Washington, Idaho, Nevada, Arizona, Hawaii, Alaska, Colorado, and Wyoming. Students are expected to graduate at the end of fifth term of the program after successful completion of all MLS degree requirements. The program courses build on one another, so courses **must be taken in sequence**. In addition, all courses are offered only once per academic year.

If, at any time, an admitted student desires to voluntarily withdraw from the program for a finite time period (**leave of absence – LOA**), or desires to delay program admission (**deferment**), they may do so. However, in each case there are only four valid reasons a leave of absence or deferment will be granted. These reasons are:

1. Documentable personal or immediate-family health hardship issues or concerns
2. Military service obligation
3. University-endorsed recommendation
4. Financial hardship

In all cases of LOA, the requesting student must be in good academic standing and the student's professional development must meet or exceed program expectations as defined by the Professional Development Assessment form.

Deferment request: Only students admitted to the program but ***who have not started program coursework*** may request deferment by speaking with the Department Chair or Program Director.

Procedure: Request for Leave of Absence (LOA)

1. A student considering LOA *must first consult* with MLS Program Director and course faculty.
2. Except in extraordinary circumstances (e.g., immediate military unit activation, life-threatening emergency, etc.) the student must submit a letter of request to the MLS Department not later than 3-weeks before the end of the term preceding the term in which the LOA is scheduled to begin. The letter should be addressed to the MLS Program Director, and it must clearly, but briefly explain the reason for the request. If the leave of absence is granted, a corrective action plan will be written in consultation with and be endorsed by signature of the MLS Program Director, all course faculty and student. In extraordinary circumstances, the filing deadline may be waived; however, the request must still be filed as soon as is feasible under the circumstances.
3. In cases of LOA, the PPC will convene within two working days of receipt of a completed request. The committee must render a decision within five working days of the initial meeting of the PPC.
4. The student will be notified in writing within 5 working days of the PPC's decision. **NOTE:** Acceptance of a student's letter of request and corrective action plan by the MLS program office does mean that the student has been granted LOA approval.
5. A medical leave of absence is granted by the Vice President of Student Affairs.

Limitations of LOA Status

- ***LOA from the MLS program is not a LOA from the university.*** This must be requested from the Vice President of Student Affairs.
- Any student granted program LOA remains subject to and is solely responsible for meeting the Oregon Tech policies and procedures governing University admissions and registration, including but not limited to payment of applicable tuition and fees.
- LOA students are subject to dismissal from the program if they fail to meet the terms of the LOA action plan.
- A student granted LOA remains a student in the MLS Program while on leave but may not engage in any program-related activities.

- *LOA TIME LIMITS:* LOA status is granted for no less than two weeks and no longer than 1 full, academic year (includes summer term). Decisions regarding missed coursework and/or remediation of coursework are made by MLS program director, the course faculty of record, and when appropriate, in consultation with other faculty, the program clinical externship coordinator and appropriate clinical affiliate(s) if need be.
- Any returning LOA student is required to file a letter of request for re-entry with the MLS program office at least three weeks prior to the anticipated date of return from LOA. The date of re-entry must be identical to the one described in the original LOA corrective action plan filed with the MLS Program. Failure to file this request on-time may result in further delay of the student's re-entry and subsequent progress, promotion, and graduation from the program.

Medical Leave of Absence

The students requesting a medical withdrawal based on a physical or mental health condition should consult with the Vice President of Student Affairs or designee. The student is responsible for providing documentation from either the Director of the Student Health Center, the Director of Counseling or another appropriate medical or mental health professional. The Vice President of Student Affairs or designee will make a determination based on the recommendation as well as any additional evidence provided by the student. See Oregon Tech policy at https://www.oit.edu/docs/default-source/Student-Affairs-/student-handbook/student-medical-leave.pdf?sfvrsn=2

Voluntary Withdrawal from the Program

A student may voluntarily withdraw from the Medical Laboratory Science Program whenever they no longer wish to be a student in the Program. To withdraw from the program, a student should submit a written request to the MLS Program Director. Additionally, the student should notify the Oregon Tech Registrar's Office. Students who withdraw from the program but later change their mind must re-apply following the customary application process. Therefore, before withdrawing from the Program, a student should carefully consider available alternatives and seek MLS program director counsel before requesting withdrawal from the program.

Grades

The MLS program curriculum is designed to provide every student with learning experiences to make gains in the three major learning domains: cognitive (theoretical knowledge), psychomotor (technical skill), and affective (professional behavior). In each course, students are provided learning objectives that describe expected achievement in all three learning domains. Students are also provided with the grading standards used to assess academic achievements. Students will receive grades that reflect the level of their performance. An assessment of the professional conduct may be considered in determination of all grades earned while in the program.

Being a part of a health profession and a joint program with OHSU, the MLS program follows a higher grading standard. In summary,

- Grades for all program courses are determined at the conclusion of each quarter in which a course is taken and then submitted to the registrar by the faculty of record for the course. (The Oregon Tech registrar's office requires grades to be filed electronically.)
- MLS students must pass with a grade of C or better in all of their professional program courses.
- The grade scale used in the program is shown in Table 3.

Table 3 OIT/ OHSU MLS Grade scale

MLS-Scaled Score (%)	Letter Grade	Meaning	Points Per Credit Hour	Used to Calculate GPA
100 - 92	A	Exceptional	4	Yes
91 – 82	B	Very Good	3	Yes
81 – 75	C	Satisfactory or Fair	2	Yes
74 – 60	D	Inferior/ MLS-Not passing	1	Yes
< 60	F	Failed	0	Yes
≥75	I	Incomplete	0	No
≥75	IP	In Progress	0	No
N/A	N	Audit	0	No
<75	NP	No Pass	0	No
≥75	P	Pass	0	No
N/A	W	Withdrawn	0	No
N/A	Z	No grade Assigned	0	No

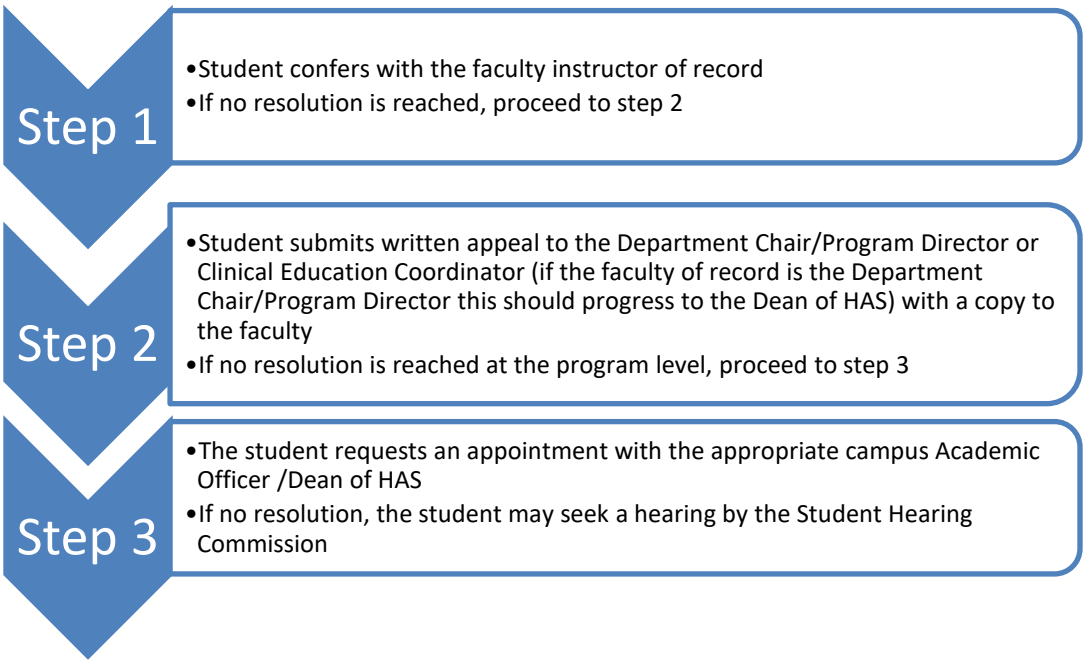
For additional information concerning grading at Oregon Tech, refer to the current Oregon Tech General catalog https://www.oit.edu/registrar/registration/catalog

Academic Grievances

It is the policy of Oregon Tech to provide students with a means for resolving academic grievances. This policy is written and implemented in accordance with Oregon Tech's policies governing student conduct and academic grievances. These policies are described in the Oregon Tech Student Handbook available through Oregon Tech Student Affairs main webpage http://www.oit.edu/docs/default-source/Student-Affairs-/student-handbook/student-academic-grievance-policy.pdf?sfvrsn=8 Any program student who has an academic grievance should follow the steps described in the Academic Grievance policy to achieve resolution.

A generalized approach to resolving grievances is shown in Figure 1.

Figure 1 – Generalized approach to resolving academic grievances



STUDENT POLICIES AND INFORMATION

Attendance

Being in class and participating in program activities is vital to the scholarship and professional development of each Oregon Tech • OHSU MLS program student. On occasion, throughout the time in the program, students are required to attend pre-scheduled functions or events. It is the policy of the program that, in all instances that require students to be in attendance at these functions or events, students are notified well in advance of the date, time and place where they need to be.

Arriving late to class, leaving class early, or missing class minimizes the opportunity to learn. Absences result in diminished lab skill development and missed opportunities to acquire needed information. In all cases, academic performance and professional demeanor suffers. Consequently, because of the rigor and accelerated nature of the program curriculum, **attendance is mandatory for all classes, labs, and supervised clinical experiences unless the faculty instructor of record notifies students to the contrary**. Individual course faculty determines whether attendance and participation is considered in the course grade determination.

Quarterly class schedules are determined by the program faculty and made available to students when they register for classes. During the first four quarters of the program, students should be prepared to be in classes on a Monday through Friday, 8:00 a.m. – 6:00 p.m. schedule. Federal regulations require course faculty to verify attendance/non-attendance for every student.

The few exceptions when students are not expected to be in class include but are not limited to scheduled, officially authorized Oregon Tech holidays and school closures including those due

to adverse weather. Also, students in Externship courses are not expected to be in training during other official holidays observed by the university and their assigned clinical site.

If a student requires time off from classes for religious purposes, they must submit a written request to the course instructor of record at least two weeks prior to the anticipated date(s) of absence. The request must include the dates and times the student anticipates absence from class. The instructor will prepare an action plan. A copy of the plan is provided to the student and a copy is placed in the student's program file. If the student is taking an externship course, a copy of the plan is also provided to the appropriate training site(s).

Regarding absences

1. Absences will be considered excused only if due to:
   - Illness/injury (the Program reserves the right to request a health care provider's note absence due to illness beyond two consecutive days' duration) or
   - Personal or immediate family emergency or
   - Anticipated absence pre-approved in advance by a program faculty instructor
2. If an emergency or illness arises, students **are required** to notify the course instructor as soon as possible via phone or email; leave a message when necessary.
3. Students' employment and elective personal obligations ***ARE NOT*** to be planned for or engaged in during scheduled class time and are not viable excuses for missing class. Program faculty will make the final determination as to whether an absence will be considered "excused."
4. Students remain accountable for all information and skills presented during their absence from class. Missed assignments and/or examinations may or may not be "made up" and/or remediated at the discretion of the course faculty. The make-up of certain lab "performance" exercises and tests may not be feasible.
5. Unexcused absences are not tolerated and as a professional development issue, such incidences may be referred to the Progress and Promotions Committee for review and appropriate action.
6. Absence due to inclement weather: students are strongly encouraged to sign-up for OIT-Alert (go to http://www.oit.edu/oit-alert). Students are not expected to be in class whenever campus is closed due to increment weather or to travel to clinical training site(s) when it is not safe to do so because of adverse weather conditions.

For additional information regarding attendance during clinical training (Externship courses), refer to the program externship handbook when it is available.

Regarding Dead Week and Finals Week (OIT Policies 14-023 and 14-025)

Dead Week (the period of Monday morning prior to finals week until the Monday morning of finals week) is the last week of regularly scheduled activities for the term. University policy dictates that no final examinations be given during Dead Week, and no student activities or athletic events are scheduled. **Projects and/or examinations due Dead Week may not exceed 20% of the final course grade without giving students at least three weeks prior notice.** The appropriate dean must approve any exceptions to this policy.

Final examinations are scheduled for the eleventh week of the term. The date and time for each class final exam is published with the class schedule every term. *MLS course schedules do*

not follow the typical university class meeting schedule
http://www.oit.edu/registrar/registration/final-exam-schedule. **T*herefore, the MLS program will assign final exam times as to not overwhelm students on any one day.*** As such, all teaching faculty are required to specify in the course syllabi the date, time and place of final exams and to distribute this information to students the first week of class. Individual students may request exceptions to this policy. Such requests must be approved in advance by the faculty instructor. Furthermore, course faculty instructors may request exceptions to this policy. The exception must be approved by the HAS college dean and students should be given at least three weeks prior notice of the change.

Classroom Conduct

Projecting a professional image means that each student should come to class prepared to learn and participate in the activities of the class. Accordingly, at the very least this requires that:

- During a presentation, common courtesy is expected. Students should refrain from unnecessary conversation while a lecturer is speaking.
- Students are expected to arrive on time and not delay or disrupt the presentation by reason of tardiness. Tardiness is unacceptable. Chronic tardiness will not be tolerated and will be viewed as a behavioral development issue and referred to the Progress and Promotions Committee for appropriate action. (Lectures lasting more than an hour and a half generally allow a ten (10) minute break midway through. Break periods, however, are not "guaranteed" and, at the discretion of the instructor, may be for periods of time less than ten minutes.) Students should not disrupt a presentation to leave class in the event a break is not granted. However, students may tactfully request a break, if a class exceeds an hour and a half.
- Following a break, students are expected to return to class promptly for the next scheduled presentation without summons from faculty or staff. After the presentation begins, tardy students should enter the classroom quietly to avoid disrupting the lecture.
- Disruption of class due to cell phone or audible notifications are not acceptable class behavior. During all class lectures cell phones and other computing technology, if used, must be maintained either in "vibrate" or "silent" mode. In addition, it is expected that students will wait for an appropriate break in class or between classes to respond to any messages received, unless such messages are determined to be of an urgent nature or concern a family/personal emergency. Cell phones, computers, tablets etc. are NOT allowed in the student labs unless the instructor has given permission for use during "dry lab" exercises only.
- Surfing the internet, checking/ responding to email, texting etc. may be a silent task, but it is still disruptive to students around you. Please respect your classmates and your instructor by giving them your full attention during class time.
- Unless otherwise instructed by faculty, if an instructor is more than fifteen minutes late for a scheduled class, a student representative should check with the Program office or phone 503-821-1146 for further instruction.
- Eating and drinking during lectures is at the discretion of the instructor and only if permitted in designated classrooms. Students will maintain all classrooms in a clean an orderly fashion. ***NO EATING OR DRINKING IS ALLOWED IN THE STUDENT LABORATORIES (452 and 456), THE ADJOINING COMMON LAB PREP ROOM (room 455), OR THE STUDENT LAB ATRIUM.***

Books and Supplies

There is no bookstore on the Portland-Metro campus. The bookstore at Klamath Falls may be contacted by visiting on-line https://oregontech.bncollege.com/shop/oit/home

Compliance Issues

As of July 1, 2014, all health profession students are required to meet a standardized, universal set of administrative requirements prior to doing clinical training in Oregon. (OAR 409-030-0100 to 409-030-0250). Additionally, MLS students are required to meet any and all requirements specified in the contractual agreements between Oregon Tech, OHSU and affiliated clinical training sites in order to participate in clinical training of any kind. These requirements include but are not limited to immunizations, other screenings (e.g., drug screen, background check, etc.) and trainings (e.g., OSHA-recommended safety guidelines. CPR, Bloodborne Pathogen, etc.), and proof of major medical and liability insurance. Details regarding specifics of the administrative requirements are covered during the MLS Program new student orientation and additional information on the Oregon administrative requirements may be accessed at https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=1662

Counseling and Tutoring

Students who are experiencing academic difficulties are urged to seek assistance as early possible. There are multiple ways for students to obtain help with academic and/or personal matters. *Assistance* is available:

- By asking questions in class, working and studying with classmates, talking with the course instructor either at the conclusion of class or by appointment
- By scheduling an appointment with your instructor or faculty advisor
- By taking advantage of the resources available through the Portland-Metro campus-based peer consulting center
- Via tele-counseling through an appointment with the Integrated Student Health Center. There are designated time slots for PM students each week. (541-885-1800)

Program faculty are available to assist students in understanding program policies and practices, for advising on professional and career issues, and for providing counseling or referral for personal and financial problems that may interfere with a student's progress in the program. Oregon Tech also provides students help with personal, educational and career concerns through its Student Services office. Contact Student Services Specialist at portland@oit.edu or 503.821.1250. https://www.oit.edu/portland-metro/student-services

Communication

- The Division of Health Science Programs' office serves as a clearinghouse for all messages directed to students. Emergency calls should be directed to 503-821-1146. The program representative responds to calls or voicemail messages at this number.
- Students are responsible for regularly and frequently checking their OIT email. It is the preferred means of electronic communication between faculty and students.
- Additional means used to reach students and to provide courses' information and materials include: a) Canvas Announcements accessible via TechWeb, b) student mailboxes (located in the student lab atrium; c) marker boards and/or bulletin boards in the MLS student lab classrooms and the student lab atrium
- Students are responsible for notifying as soon as possible, the Department Office, faculty, and the Office of the Registrar of changes in address, telephone numbers, e-mail addresses, and other directory information.

Computer Access and Other Student Services

Students have access to computers and the internet, and printing services within designated classrooms, the library, and student lounge areas located within the Portland-Metro campus building. Students may connect with the University via Twitter, Facebook, and You Tube. Students may also connect with each other, program faculty, and alumni via the Program Facebook. When connectivity, software, and/or hardware issues arise, contact the Oregon Tech helpdesk at helpdesk@oit.edu.

Laptop Requirements for Academic Year 2021-22

Courses at the Portland-Metro campus require students to bring a laptop. This is to ensure students have a more consistent, comfortable, and productive experience while completing schoolwork. Laptop stations are located in some classrooms where students can use monitors on campus as their second screen by utilizing a courtesy HDMI cable. Financial aid is available for students who do not have laptops or have out-of-date laptops.

Oregon Tech encourages students to decide on which brand and model best fits their academic and financial requirements. Program specific recommendations for laptops and documentation to provide assistance in locating and installing your program's software https://www.oit.edu/technology-services/bring-your-own-device. Laptops for the students in the MLS will be used for test taking and schoolwork. Dell has a special website with discounts just for Oregon Tech students www.dell.com/oit.

PLEASE NOTE: Our testing lockdown browser DOES NOT SUPPORT CHROMEBOOKS.

As a student you can get a free version of Microsoft Office 365 account which you download for free and install it on your computer. Please don't use another link for this because you will likely be signing up for a personal OneDrive/Office account which does not give you Office for free and will give you limited OneDrive access. https://www.oit.edu/technology-services/bring-your-own-device (See software guidelines- Microsoft Office)

Faculty Academic Advisors

All students are assigned an MLS Program academic advisor who is available to counsel them regarding curriculum, career options, letters of recommendation and other matters of student concern. Students are given the name of the assigned advisor during orientation. All students are encouraged to seek assistance from their advisors regarding any academic/professional concerns. Either the student or the advisor may request a change in the advisor assignment by notifying the Department Chair. You may also request an advising appointment with the Department Chair and MLS Program Director.

Faculty – Title IX Mandatory Reporters

Title IX is part of the Education Amendments of 1972 and is enforced by the U.S. Department of Education. As a mandatory reporter, university faculty and staff must carry out responsibilities to report all suspected Title IX violations of sex-based discrimination and sexual harassment, including sexual violence and child abuse / neglect. This pertains not only to students and faculty but any incidences that we become aware of.

Diversity, Affirmative Action and Equal Opportunity

Oregon Tech holds that the presence and sharing of diverse backgrounds and experiences results in a stronger and more complete educational and work experience, enriching all members of the campus community. Higher education is incomplete without real understanding and appreciation of the human differences that make individuals and groups unique. The OIT administration strongly recognizes and believes that a diverse academic environment fosters mutual understanding, interpersonal and individual respect, cultural awareness, harmony, and creativity, while providing necessary role models for all students. It is the policy of OIT that all persons shall be treated equally and fairly, and an environment free of illegal discrimination and harassment shall be maintained. The University expressly prohibits discrimination based on race, color, gender, marital status, national origin, age, disability, religion, pregnancy, sexual orientation, gender identity or expression, or any other consideration not directly and substantively related to effective performance; and in compliance with all relevant federal, state and local laws and regulations. This commitment includes taking affirmative action in employment decisions and practices; promoting discourse and activity which seek to enhance campus diversity, and which mirrors the pluralism of our society; ensuring prompt and impartial consideration of any discrimination complaint; and equitably resolving any such complaint found to have merit.

Disability Statement

Our program is committed to all students achieving their potential. If you have a disability or think you may have a disability (physical, learning disability, hearing, vision, psychological or other) which may need a reasonable accommodation, please contact the program director and one of the following persons. Because accommodations can take time to implement it is important to have this discussion at the beginning of the term. The Disability Services webpage https://www.oit.edu/academics/ssc/disability-services has links to OIT Disability Services Handbook, forms, resources and links.

- Portland-Metro, Disabilities Services Specialist: Pablo Monreal 503-821-1305; Room 130A pablo.monreal@oit.edu

Addressing Student Problems and Concerns

- Program faculty and staff serve as student advocates. To do this most effectively, faculty and staff should be notified in a timely manner of any significant incident, problem, or error that affects students.
- During the academic year, individual student problems or concerns should be directed to program personnel who are in the best position to assist the student. Therefore, students should contact: 1) course faculty/instructors for specific courses' issues; 2) assigned faculty advisors with concerns or issues of academic performance; 3) the program representative when faculty are not available to answer questions or the student seeks information about compliance issues, university operations and student services; 4) the clinical externship coordinator with questions concerning clinical affiliates and clinical training placement; 5) the department chair with questions about program operation, policy and procedures.
- When students have concerns and issues that may be more appropriately resolved through Oregon Tech Student Services, program personnel are able to provide students with referrals as may be required.

Financial Matters

Information regarding financial aid for the 2020-21 school year is available through the Oregon Tech financial aid office. Program students are solely responsible for all costs associated with their attendance at Oregon Tech. These costs include but are not limited to:

- Required and recommended textbooks. A booklist, distributed annually, contains a list of required textbooks. Students do not have to purchase those books listed as 'recommended'.
- Health insurance and immunizations.
- Housing and transportation costs (including any parking fees and associated fines) while on campus (Portland-Metro) and when assigned to an externship site.
- Lab and associated special program fees.

For additional information refer to the 2021-22 Oregon Tech General catalog https://www.oit.edu/registrar/registration/catalog

Financial Aid

Information concerning financial aid is available through the admission's office. Students may also access information by visiting https://www.oit.edu/college-costs/financial-aid

Scholarships

- Oregon Tech Scholarship information is available at https://www.oit.edu/college-costs/scholarships

Additionally, the MLS Program notifies students about profession-specific scholarship opportunities available through various profession organizations including but not limited to the American Society for Clinical Laboratory Sciences (ASCLS), and through industry. Students may read more about scholarships available through ASCLS by visiting the following websites:

- ASCLS https://ascls.org/alpha-mu-tau-scholarships/
- ASCLS-Oregon https://www.asclsoregon.org/betsy-baptist-scholarship/

Health Insurance

While Oregon Tech does not require most students to have health insurance, **MLS program students are required to have and show proof of comprehensive health insurance coverage.** This is because during any student's tenure in the MLS program they will work with patient samples and be in close contact with patients who may be ill. This means MLS program students are at high risk for exposure to certain infections.

NOTE: **MLS program students are not permitted in student labs or to begin the Clinical Externship without demonstrating proof of insurance coverage.**

Oregon Administrative Rules (OARs)

Immunizations

Oregon Tech requires that all students show documentation of protection against a number of vaccine-preventable diseases, specifically MMR and TB. Additionally, all MLS program students are required to meet immunization requirements as dictated by OARs 409-030-0100 to 409-030-0250.

https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=1662

Specifically, students must provide documentation of vaccine or immunity via blood titer or valid history of disease.

- Hepatitis B
- MMR (measles, mumps, rubella)
- Tdap (tetanus, diphtheria, pertussis)
- Varicella
- Influenza (seasonal) and polio (recommended)

In addition, a Two-Step TST, Tuberculin test is also required. The two tests must be at least a week, but no more than a year apart, and have to be valid through your externship.

Covid-19 Vaccination

As a student healthcare worker in the state of Oregon, you are required to be fully vaccinated for Covid-19. You may request a medical or religious exemption. No philosophical exemptions will be given. All requests must be approved.

PLEASE NOTE: Our clinical affiliates may require students to be vaccinated, with no exemptions being given. See Clinical Externship policies page 16.

Criminal Background Check, Drug Screen and CPR

Other requirements include a criminal background check, a required drug screen and a current valid AHA CPR certification. You will be instructed when you should complete these requirements.

Liability Insurance

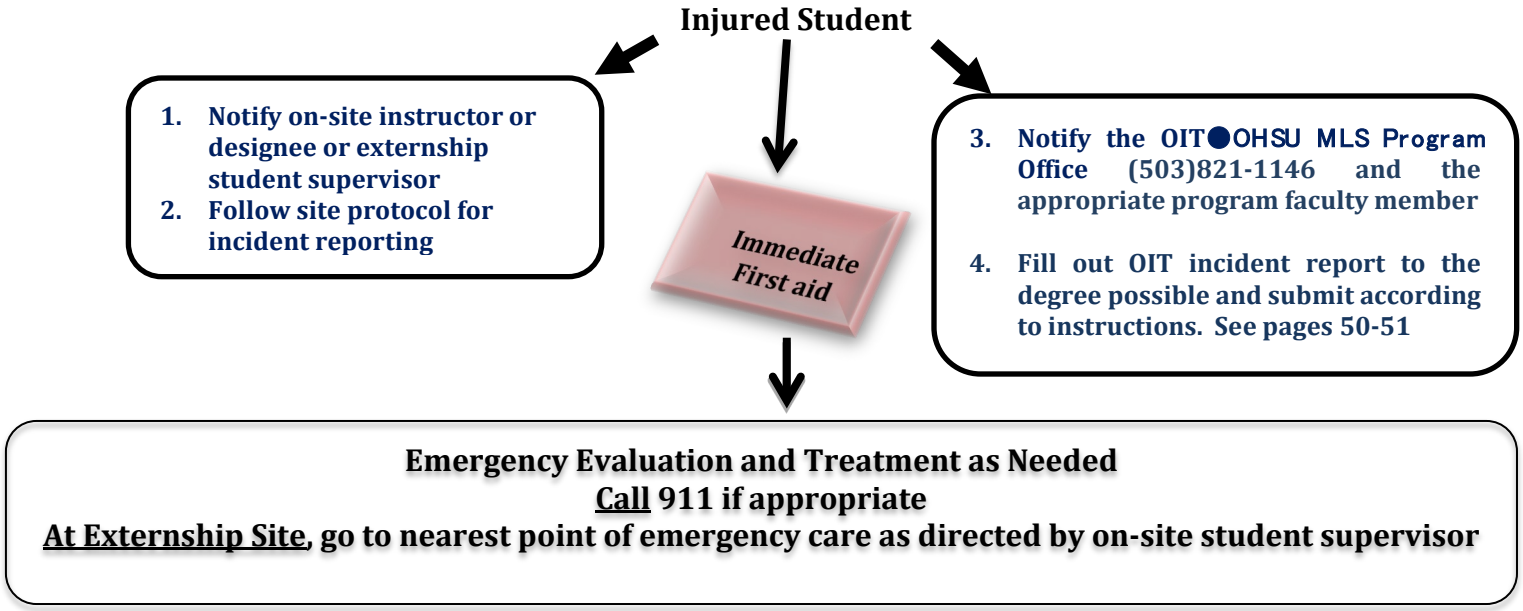
While enrolled in the Oregon Tech • OHSU MLS Program at, students are covered by general liability. Additionally, during the Externship, MLS students are covered by general and professional liability policies for professional students. There is an additional cost attached to the fall term (5th term) tuition and fees for this coverage.

INJURY POLICY

A. Handling Student Injury *NOT* Involving Blood Born Pathogen Exposure

Should a program student have an accident or suffer an injury during class on the Oregon Tech – Wilsonville campus or during a clinical externship rotation that **DOES NOT *involve exposure to blood borne pathogens***, the following actions should be taken:

Procedure

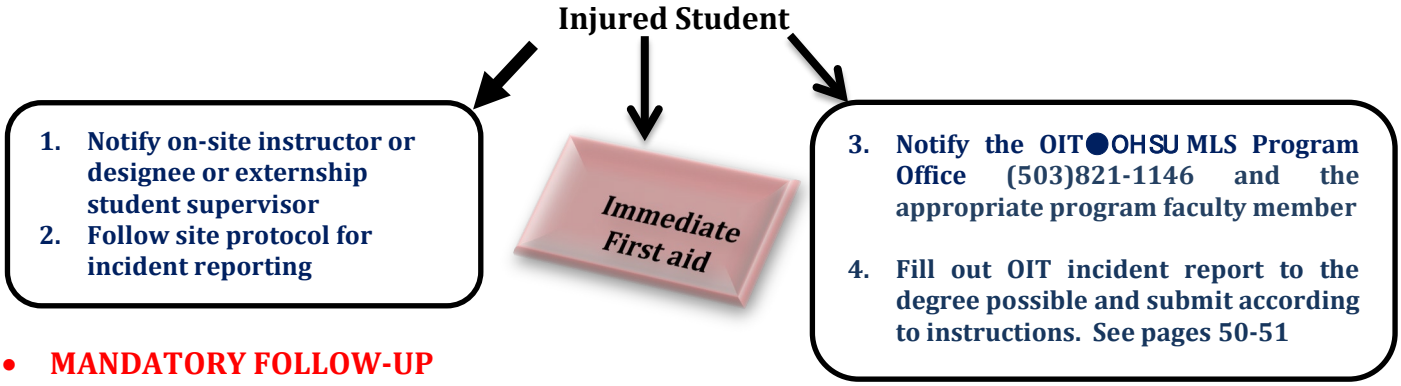


B. Handling Student Injury Involving Blood Born Pathogen Exposure

Should a program student have an accident or suffer an injury during class on the Oregon Tech – Wilsonville campus or during a clinical externship rotation that **DOES *INVOLVE exposure to blood borne pathogens***, the following actions should be taken:

Procedure

- **EMERGENCY EVALUATION, TREATMENT, COUNSELING & EDUCATION**



- **MANDATORY FOLLOW-UP**

Emergency Evaluation, Treatment, *COUNSELING AND EDUCATION* as Needed;
Call 911 if appropriate
At Externship Site, go to nearest point of emergency care as directed by on-site student supervisor and follow site's workplace blood borne pathogen exposure control plan.

MANDATORY follow-up with OIT student health services regardless of where the injury occurred.

Professional Certification

By definition, certification is a process of external peer review and examination in which a non-governmental agency or association grants public recognition to an individual who meets established experiential qualifications, and educational as well as functional standards. Participation in professional certification is voluntary, but there are factors that make it an invaluable last step to a successful professional career. These factors include professional identity, fulfillment of licensure obligations in states that require a professional licensure, continued professional development, and increased employment opportunities.

The American Society for Clinical Pathology (ASCP) is the world's largest society of laboratory professionals including pathologist and non-physician professional laboratorians like medical laboratory scientists. Its Board of Certification (BOC), is the gold standard for certification of pathologists' assistants and laboratory professionals. As a certification agency, the BOC prepares relevant standards and develops procedures that ensure the competence of non-physician medical laboratorians.

Oregon Tech • OHSU MLS Program students who complete the program are eligible to take the Medical Laboratory Scientist (MLS) certification examination administered through the American Society for Clinical Pathology (ASCP).

Licensure Information

Federal regulations require educational institutions to disclose whether its degree programs meet educational requirements for licensure in each state.

Oregon and Washington do not require licensure to work as an MLS. For additional information and contacts by state, please visit The American Society for Clinical Pathology (ASCP) website. https://www.ascp.org/content/board-of-certification/get-credentialed/#state-licensure Some state licensure boards have additional requirements beyond successful degree completion to obtain a license. Changes in requirements can happen without notice. We highly recommend that students contact the applicable licensure board in the state(s) where they intend to obtain a license before beginning our academic program for the most recent requirements.

As of September 2021, the following states and territories require licensure:

State	Does this program meet requirements?
California	**No**
Florida	Yes
Hawaii	Yes
Louisiana	Yes
Montana	Yes
New York	**No**
Nevada	Yes
North Dakota	Yes
Tennessee	Yes
West Virginia	Yes
Puerto Rico	Yes

Professional Organization Memberships and Resource Link*s*

American Society for Clinical Laboratory Science

The American Society for Clinical Laboratory Science (ASCLS), provides dynamic leadership and vigorously promotes all aspects of Medical Laboratory Science practice, education and management, Student membership information is available at URL http://www.ascls.org/membership/join

American Society for Clinical Pathology

"The American Society for Clinical Pathology (ASCP) is the world's largest professional membership organization for pathologists and laboratory professionals. Our mission is to provide excellence in education, certification, and advocacy on behalf of patients, pathologists and laboratory professionals across the globe. With more than 100,000 members, the society's influence has guided the application and evolution of the pathology and laboratory medicine specialty since 1922." Student membership information is available at https://www.ascp.org/content/membership/become-a-member

Student Records

The Program creates and maintains files on each program student. These files contain applications, transcripts, and other demographic information furnished by the student or by others at the student's or the Program's request. Additional information that may be found in a student's program record includes but is not limited grades reports, information concerning discipline and counseling, clinical performance, and other individual student behavioral records. Records are housed in locked cabinets in the Division Program Representatives office. Official academic records and original University application documentation are maintained by Oregon Tech's Office of the Registrar.

Student records are protected by the Family Educational Rights and Privacy Act (FERPA), a federal regulation which assigns rights to students and responsibilities to educational institutions regarding students' education records. The Act governs the maintenance and release of information from those records.
Anyone may learn more about FERPA regulations by visiting the Oregon Tech website at https://www.oit.edu/registrar/student-records/ferpa/resources .Additional information is also available by contacting the Oregon Tech Registrar, Wendy Ivie, , at 541.885.1539 or wendy.ivie@oit.edu or FERPA Coordinator, Heather Smith at 541-885-1154 or heather.smith@oit.edu

Student Service Work and Employment Issues

The MLS Program curriculum is fast-paced and rigorous, and successful completion requires full attention of students. Students are strongly discouraged from working while enrolled in the Program. The Program does not make accommodations – excused absence or tardiness, for students who choose to work. The Program reserves the option to require students on academic probation to give up their employment as a condition of continuing in the Program.

During clinical rotations, students learn to perform clinical testing procedures. They are under close supervision of a teaching MLS and do not report patient values without supervision. Most students begin by performing these procedures slowly; but over time as the procedures are repeated, students become more proficient and efficient, until they approach entry level competency. However, this does not mean that they are expected to carry out routine procedures and to report patient results independently, even though they may have attained entry-level competency. Clinical rotations are intended to be learning experiences and students will not be expected to work in lieu of a training site's regular staff. **At no time under any circumstance during regularly scheduled school time will any program student be substituted for regular laboratory staff or scheduled to work as a paid employee of any clinical affiliate.**

Student Dress Code

To project an image of professionalism and to comply with safety standards, each student is expected to adhere to the student dress code. Any student found not in compliance, will be asked to leave and return appropriately dressed. The code is as follows:

- Clothing, including medical scrubs, should be worn fitted for size, clean and free of holes, tears, fringe and excessive wrinkling. T-shirts with vulgar and/or offensive words and/or graphics, see-through or low-cut tops, shorts, strapless or spaghetti strapped garments are not acceptable.
- Shoes are to be closed-toe and low-heeled. Sandals of any kind are not acceptable in lab.
- The wearing of jewelry (including nose, ear, lip, and other types of body ornaments), perfume and lotions should be minimized for personal safety and concern for others.
- Hair, including beards, sideburns and mustaches, is expected to be worn in a neat, clean and combed manner. Long hair, including bangs, is to be tied or pinned back away from the face when in the student laboratory.
- Laboratory coats are provided to student. The coats are worn only in the student laboratory and left hanging in the student lab atrium anytime a student leaves lab class. Lab coats are replaced if soiled, ripped, or torn.
- Fingernails are to be neatly manicured and of length not to exceed 1/4 inch beyond the fingertip. Nail enhancements (as recommended by the Centers for Disease Control and Prevention) are not permitted. This includes but is not limited to the following: artificial nails, acrylics, tips, wraps, appliqués, gels, or any additional items applied to the nail surface with the exception of nail polish. Nail polish should be smooth and not chipped. Extremes in color are may not permissible at some clinical sites.
- During externship activities students will comply with dress codes of assigned medical labs.

Transportation

It is the responsibility of each program student to provide transportation to and from campus and to their assigned Externship training site(s) throughout the student's tenure in the program. For information on commuting and transportation to the Portland-Metro campus, go to URL https://www.ridesmart.com/transit (Route #6 Canyon Creek)

Adverse Weather

Closing the Oregon Tech Portland-Metro campus because of inclement weather is a decision based primarily on concern for the safety of students, faculty, staff and visitors. The campus closure procedure is implemented when there is concern that snow or ice may prevent safe use of sidewalks, parking lots and campus roads. Pre-closure consultation, led by the Associate Provost includes officials in the areas of Facilities Services, Campus Safety, Academic Affairs and Student Life. In the event of a situation adversely affecting campus operations, public health, or the well-being and safety of students, faculty, or staff employees, the Associate Provost or his designee may declare a temporary suspension of any or all operations at the campus. If campus operations are suspended, MLS program students are not expected to travel to campus for class or to clinical rotation sites in the Portland Metro area. Students are expected to monitor radio and TV stations and the University's inclement weather web site (http://www.oit.edu/oit-alert/inclement-weather) for information regarding school closure. Students are encouraged to enroll in the OIT alert system to obtain text and email alerts https://www.oit.edu/oit-alert. Students should also monitor their OIT email, as individual instructors need to cancel class or alter the schedule.

Portland Metro Campus Facilities: Access and Security

Access hours (subject to change) during the academic terms: **Monday – Friday: 7:00am – 10:00pm; Saturday: 7:00am – 6:00pm ● Sunday: Building closed**
Students are issued picture ID badges that should be carried at all times for security purposes. The campus security is available during evening hours to escort campus personnel to and from parking areas and bus stops if needed.

Portland-Metro Campus Student Services

Information regarding these and other student services is available on-line
https://www.oit.edu/portland-metro/student-services

Affirmative Action and Equal Opportunity	Library	Student Health & Counseling Services
Campus Safety	Local Transportation	Student Organizations
Career Services	Peer Consulting and Proctoring	Title IX
Disability Services	Registrar	Transportation Options
Diversity- Equity- Inclusion	Student Affairs	Veteran Student Information
Financial Aid	Student Awards	
Food Options	Student Consumer Info	
Housing Options	Student Handbook	
International students	Student Success	

DEPARTMENT OF MEDICAL LABORATORY SCIENCE
Professional Program Courses

A. MLS 100 Introduction to Medical Laboratory Science (S) (1-3-2)
Orientation to the theory and practice of all aspects of the Medical Laboratory Science profession. The history of Medical Laboratory Science, professional organizations and career opportunities are discussed.

B. MLS 107, MLS 207, MLS 307, MLS 407 Seminar (Hours to be arranged each term as needed.)

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1. MLS 415 Clinical Chemistry I (W) (5-3-6)
Fundamentals of chemical analysis of body fluids. Laboratory practice in chemical formats, data evaluation, laboratory utilization, and quality control theory. Laboratory exercises linked to lectures: amino acids, proteins, carbohydrates, lipids, blood gases, enzymes, trace elements, electrochemistry, osmometry, electrophoresis, and spectroscopy.

2. MLS 416 Clinical Chemistry II (S)(5-3-6)
Fundamentals of chemical analysis of body fluids. Laboratory practice in chemical formats, data evaluation, laboratory utilization, and quality control theory. Laboratory exercises linked to lectures: renal and liver function, porphyrins, hormones, pregnancy, fetal development, bone metabolism, nutrition, and geriatrics. Prerequisite: MLS 415 Clinical Chemistry I

3. MLS 417 Clinical Chemistry III (Su) (2-0-2)
The theory, practical application and technical performance of chemical analysis. Emphasis on theory of therapeutic drug monitoring, toxicology, proteomics, individualized screening, and method validation. Corequisite: MLS 416 Clinical Chemistry II

4. MLS 420 Clinical Immunology and Infectious Serology (F) (4-3-5)
Lecture/laboratory coverage of human immunity, including innate and adaptive immunity, immune system organs, tissues, and activation. Immunological methods used in the clinical lab to assess human immune response in health and in various disease states are studied.

5. MLS 422 Molecular Diagnostic Methods (Su) (3-3-4)
Coverage of molecular techniques used in the clinical laboratory to diagnose disease. Topics covered include principles of molecular biology, nucleic acid isolation, purification, amplification, quantitation, and discrimination. Specimen collection/handling, ethical issues and molecular lab operations are also covered.

6. MLS 424 Hemostasis (Su) (2-3-3)
Lecture/lab coverage of the mechanisms of hemostasis and basic pathophysiology of hemostatic disorders. Students perform laboratory procedures pertaining to hemostasis, interpret results and correlate with other laboratory data to identify disease states.

7. MLS 432 Foundations of Medical Laboratory Science I (F) (3-3-4)
The first of three courses covering essential professional practice issues. Subjects covered include: quality control/ quality assurance, laboratory safety, laboratory mathematics, ethics, educational methods and phlebotomy.

8. MLS 442 Hematology I (F) (4-6-6)
Lecture and laboratory coverage of normal development and function of blood cells. Students will learn to evaluate normal and abnormal blood cell morphology through microscopic examination of blood smears. Students perform laboratory procedures pertaining to hematology.

9. MLS 443 Immunohematology I (S) (3-3-4)
Lecture/lab coverage of immunohematology with practical application in the contemporary blood bank laboratory. Topics include blood groups biochemistry, genetics, and immunology, test methods and transfusion practices including donor selection, component preparation, quality management and compliance issues. Prerequisites: MLS 420

10. MLS 444 Microbiology I (W) 4-6-6)
Lecture/lab coverage of human bacterial pathogens seen in the clinical laboratory including gram positive and gram-negative cocci, and gram positive and gram-negative bacilli. Principles and methods of clinical microbiology laboratory diagnosis of bacterial diseases are studied.

11. MLS 445 Microbiology II (S) (2-6-4)
Lecture/lab coverage of diseases caused by, and clinical laboratory identification of, human microbial organisms including anaerobes, spirochetes, mycobacteria, chlamydia, and rickettsia. Interpretation of clinical specimens, identification of pathogens, and the recognition of normal flora is also studied. Prerequisite: MLS 444

12. MLS 449 Principles of Urinalysis (S) (2-3-3)
Lecture and laboratory coverage of renal function, urine formation, and methods used to analyze urine in the medical laboratory. Students perform physical, chemical, and microscopic analyses on clinical samples and correlate results with states of health and disease in man.

13. MLS 452 Hematology II (W) (4-3-5)
Comprehensive study of the pathophysiology of hematological disorders. Students perform microscopic examination of blood films, interpret results and correlate with other laboratory data to identify disease states. Prerequisite: MLS 442

14. MLS 453 Immunohematology II (Su) (2-3-3)
Continued study of immunohematology emphasizing clinical decision-making and problem-solving related to blood banking and transfusion therapy practices. Prerequisite: MLS 443

15. MLS 462 Foundations of Medical Laboratory Science II (W) (2-3-3)
The second of three courses covering essential professional practice issue. Subjects covered include: educational methods, clinical laboratory management, research and a comprehensive simulated laboratory experience. Prerequisite: MLS 432

16. MLS 463 Foundations of Medical Laboratory Science III (F- Ext) (0-3-1)
Third of three courses covering essential professional practice issues. Emphasis on practical experience through the application of theories and concepts of professional development, administration and supervision at an approved off campus clinical site. Prerequisites: MLS 432 and MLS 462

17. MLS 464 Medical Mycology and Parasitology (F) (2-3-3)
Lecture and laboratory coverage of medically important fungal and parasites with emphasis on those seen in a clinical laboratory. Principles and methods of clinical laboratory diagnosis of infections and diseases caused by these organisms are studied.

18. MLS 470 Chemistry and Immunology Externship (F- Ext) (0-12-4)
Practical experience at an approved off-campus clinical site emphasizing application of knowledge and skills to perform a wide variety of testing in a contemporary clinical chemistry/immunology laboratory and further develop discipline-specific competency. Prerequisite: successful completion of all didactic, pre-clinical coursework in the MLS program.

19. MLS 471 Hematology Externship (F- Ext) (0-12-4)
Practical experience at an approved off-campus clinical site emphasizing application of knowledge and skills to perform a wide variety of testing in a contemporary clinical hematology laboratory and further develop discipline-specific competency. Prerequisite: successful completion of all didactic, pre-clinical coursework in the MLS program.

20. MLS 472 Microbiology Externship (F- Ext) (0-12-4)
Practical experience at an approved off-campus clinical site emphasizing application of knowledge and skills to perform a wide variety of testing in a contemporary clinical Microbiology laboratory and further develop discipline-specific competency. Prerequisite: successful completion of all didactic, pre-clinical coursework in the MLS program.

21. MLS 473 Immunohematology Externship (F- Ext) (0-9-3)
Practical experience at an approved off-campus clinical site emphasizing application of knowledge and skills to perform a wide variety of testing in a contemporary blood bank laboratory and further develop discipline-specific competency. Prerequisite: successful completion of all didactic, pre-clinical coursework in the MLS program.

Teach Out Plan

In the event of program disruption or closure, the "teach out plan" is as follows:

- In the event of a disruption or change in services offered due to circumstances such as a pandemic, the university and program will collaborate with public authorities to develop appropriate plans to continue educational services whenever possible. This could include but is not limited to remote delivery of lectures, postponing in person laboratory sections and/or externship rotations. This will likely require a modified schedule and may affect student's graduation date.
- If closure is due to exceptional or uncontrollable circumstances, such as a fire or natural disaster, the university and program will work with OHSU, other colleges/ universities and facilities in the area to make arrangements for students to complete their coursework. Students will reenter the program and progress, likely following a modified schedule. This may affect student's graduation date.
- If the closure is due to the college's decision to no longer offer the program, then all enrolled students will progress as planned. No new students will begin the program, only existing students will be enrolled and will be allowed to complete.

REFERENCES AND RESOURCES

Program Address

Oregon Institute of Technology – Portland-Metro
Division of Health Sciences ● Department of Medical Laboratory Science
27500 SW Parkway Ave ● Wilsonville, Oregon 97070
TEL: (503) 821-1146 • FAX: (503) 218-1126
WEB: https://www.oit.edu/academics/degrees/medical-laboratory-science
Face Book: http://www.facebook.com/groups/327905870626616/

Department of Medical Laboratory Science Directory

Rachelle Barrette	Rachelle.Barrette@oit.edu	503-821-1147	Office 444
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Deb Disko	Deb.Disko@oit.edu	503-821-1146	Office 441
Caroline Doty	Caroline.Doty@oit.edu	503-821-1156	Office 445
Dawn Taylor	Dawn.Taylor@oit.edu	503-821-1157	Office 448
Kristen Weber	Kristen.Weber@oit.edu	503-821-1290	Office 446

On-line Accessible Resources

1. Oregon Tech 2021-22 General Catalog on-line http://www.oit.edu/catalog
2. OHSU Code of Conduct online
   http://www.ohsu.edu/xd/about/services/integrity/policies/coc.cfm
3. OHSU Compass Testing - https://o2.ohsu.edu/human-resources/learning-and-development/compass.cfm
4. National Accrediting Agency for Medical Laboratory Sciences http://www.naacls.org/
5. Library Services – Portland-Metro
   Beth Caldwell, Interim Librarian - 503-821-1258
7. Veterans' Services http://www.oit.edu/admissions/student-veterans
   Portland-Metro Certifying Official: Kendal Marks - 503-821-1268
8. Oregon Tech – Portland Metro Student Services
   https://www.oit.edu/portland-metro/student-services

Important Dates

(Please note that these dates may change if required by circumstances.)

Fall 2021

Registration for fall term begins	May 18
Classes Begin	September 29
Tuition and Fees due	October 12
Registration for winter term begins	November 8
Veteran's Day Holiday	November 11
Thanksgiving Day Holiday	November 24-26
MLS Externship Final Day	December 8
Class of 2021 MLS Program Commencement	December 11, 2021
Final Exams Week	December 13-17

Winter 2022

New Year's Holiday observation	December 31
Classes Begin	January 4
Tuition and Fees due	January 14
Martin Luther King, Jr. Holiday	January 17
Registration for spring term begins	February 14
Final Exams Week	March 14-18

Spring 2022

Classes Begin	March 28
Tuition and Fees due	April 8
Registration for summer term begins	May 2
Registration for fall term 2022 begins	May 9
Memorial Day Holiday	May 30
Final Exams Week	June 6-10

Summer 2022

Classes Begin	June 20
Tuition and Fees due	?
Independence Day Holiday	July 4
Summer term ends	August 12

Fall 2022

2nd Year: Externships (includes SIM lab)	August 22- December 7
Class of 2022 MLS Program Commencement	December 10, 2022

OREGON INSTITUTE OF TECHNOLOGY
OREGON HEALTH & SCIENCE UNIVERSITY
Medical Laboratory Science Program

Student Action Plan Form

Student Name: Date:

Course:

SECTION I: Identify the problem (Check all that apply)

☐ Academic

- ☐ Failure to pass the course with a grade of 75% or greater
- ☐ Failure to pass the externship written exam with a grade of 75% or greater

Explain:

☐ Non-academic

- ☐ Failure to meet the expected levels on the Clinical Competency Checklist
- ☐ Professional Development Evaluation
  - ☐ Student receives a score of 1 for one or more Knowledge and Skills criteria
  - ☐ Student receives a score of 1 for one or more Habits and Attitudes criteria
- ☐ Student fails to meet MLS Program Essential Requirements
- ☐ Other

Explain:

SECTION II: Briefly describe the performance expectations relative to the problem(s).

SECTION III: Briefly describe the actions being taken, including the time frame for actions to resolve the problem(s). Identify person(s) responsible for monitoring completion of actions.

I have counseled the student regarding this issue.

_____

PROGRAM CLINICAL COORDINAOR **DATE**

_____

PROGRAM DIRECTOR and DEPARTMENT CHAIR **DATE**

_____

MLS FACULTY MEMBER (IF APPROPRIATE) **DATE**

☐ I acknowledge that this corrective plan has been discussed with me.

_____

STUDENT SIGNATURE **DATE**

(Attach any documentation)

OIT * OHSU MLS Professional Development Evaluation

Course: _____ **Term:** _____ **Year:**_____

Student Name: _____

Objective: The primary objective of this assessment is to ensure that each student completes the program with a level of technical competency and demonstrates the behavioral standards of the profession.

Instructions: The student will be evaluated after each of the major student laboratory practicums.

Evaluator: Select the description which most closely matches the student's performance.

- A score of 3 - the student exceeds expectations of competency for a MLS student entering the clinical externship.
- A score of 2 - the student meets expectations of competency for a MLS student entering the clinical externship.
- A score of 1 - minimal competency has not been met. **Scores of 1 require additional comments documenting why the score was chosen. Place comments in the Evaluator Comments section.**

Knowledge and Skills

Students are expected to receive scores of 2's and 3's. If a student receives a score of 1 in this section it is considered unsatisfactory performance and may be referred to the Progress and Promotions Committee at the discretion of the course instructor(s).

Exceeds Expectations	Meets Expectations	Below Expectations	Not Applicable or Not Observed
Circle score of 3	Circle score of 2	Circle score of 1	Circle NA

Application of Knowledge	1.	Readily able to answer theory and practical questions with little prompting	3 2 1 NA
	2.	Applies previous knowledge to new procedures with minimal instruction	3 2 1 NA
Laboratory Performance	3.	Follows laboratory and institutional safety policies	2 1 NA
	4.	Follows written procedures / verbal instruction	2 1 NA
	5.	Uses proper laboratory technique	2 1 NA
	6.	Makes minimal errors	3 2 1 NA
	7.	Performs appropriate quality control / quality assurance procedures	2 1 NA
	8.	Maintains work quality and quantity under stress	3 2 1 NA
	9.	Able to work independently; requires minimal supervision	3 2 1 NA
Laboratory Results	10.	Obtains accurate and precise results	3 2 1 NA
	11.	Records completely, clearly and accurately	2 1 NA
Utilization of Time	12.	Reasonable pace of work; able to keep up with workflow	3 2 1 NA
	13.	Utilizes time effectively	2 1 NA
	14.	Usually completes work load or assignments in normal amount of time	2 1 NA
Organization	15.	Organizes material and work	2 1 NA
	16.	Establishes priorities	3 2 1 NA
Problem Solving Skills	17.	Recognizes errors in technique, results and/ or instrument malfunction	3 2 1 NA
	18.	Shows logical thinking and resourcefulness in dealing with problems	3 2 1 NA
	19.	Determines course of action after careful analysis of all available data	3 2 1 NA
	20.	Perseveres, reluctant to abandon a problem without resolution	3 2 1 NA

Student Name: _____

Habits and Attitudes

Students are expected to receive scores of 2's and 3's. If a student receives a score of 1 in this section it is considered unsatisfactory performance and may be referred to the Progress and Promotions Committee at the discretion of the course instructor(s).

Exceeds Expectations	Meets Expectations	Below Expectations	Not Applicable or Not Observed
Circle score of 3	Circle score of 2	Circle score of 1	Circle NA

Initiative	21.	Performs routine assigned tasks	2 1 NA
	22	Seeks unsolicited tasks	3 2 1 NA
	23.	Works on improving skills	3 2 1 NA
Interest	24.	Asks relevant questions	3 2 1 NA
	25.	Alert and attentive	3 2 1 NA
Responsibility	26.	Completes required assignments / tasks	2 1 NA
	27.	Accepts responsibility as delegated	2 1 NA
	28.	Is rarely absent	2 1 NA
	29.	Notifies appropriate personnel when late or absent	2 1 NA
	30.	Reports out when leaving	2 1 NA
Interpersonal Relations	31.	Maintains good working relationship with co-workers and peers	3 2 1 NA
	32.	Functions well in a teacher / student setting	3 2 1 NA
	33.	Helps others willingly	3 2 1 NA
Professional Performance	34.	Accepts constructive criticism, open to suggestions	3 2 1 NA
	35.	Maintains professional composure in stressful situations	3 2 1 NA
Integrity	36.	Demonstrates integrity and ethical behavior	2 1 NA
	37.	Admits to errors or mistakes	2 1 NA
	38.	Follows procedures without shortcuts	2 1 NA
Cleanliness/ Orderliness	39.	Leaves work area clean and in good order	2 1 NA
	40.	Replenishes supplies and reagents	2 1 NA
Promptness	41.	Arrives on time	2 1 NA
	42.	Begins work promptly	2 1 NA
	43.	Returns from break when directed	2 1 NA
Confidence	44.	Displays confidence after appropriate time and instruction	3 2 1 NA
	45.	Recognizes limitations and asks for help when needed	3 2 1 NA
Institutional & Laboratory policies	46.	Adheres to general policies	2 1 NA
	47.	Follows dress code	2 1 NA
	48.	Maintains patient confidentiality and dignity	2 1 NA
Communication	49.	Listens well	3 2 1 NA
	50.	Receives/ gives information to others effectively & courteously	3 2 1 NA

Student Name: _____

Evaluator Comments

Areas to work on:

Signature of Evaluator **(Date)**

Student Comments: (if desired, please use additional paper if needed)

I have reviewed this evaluation: _____

Signature of Student **(Date)**

8/27/18

Oregon Institute of Technology
INCIDENT REPORT

Office of Risk Management – Klamath Falls
3201 Campus Drive, Snell Hall 112
Klamath Falls, OR 97601
Phone: 541-885-1133

Office of Risk Management – Wilsonville
27500 SW Parkway Ave
Wilsonville, OR 97070
Phone: 503-821-1277

Instructions: To be completed **WITHIN 24 HOURS** of an accident, incident or condition and returned to Risk Management at one of the above addresses. This Incident Report **is not** to be used for employee work-related accidents, incidents or conditions. **Complete ALL sections**, do not leave any blanks. Attach additional sheets if necessary to describe this incident.

Date of Report _____ Incident Date _____ Incident Time _____

Information:

Name: _____
Last MI First

Address: _____

Home Phone: _____ Cell Phone or Other: _____

Email: _____

Date of Birth: _____ Gender: _____

Affiliation: ☐ Student ☐ Volunteer ☐ Guest/Visitor ☐ Vendor/Contractor

Injury Information:

Treatment
- ☐ Received onsite first aid
- ☐ Will be seeking medical treatment
- ☐ Received medical treatment
- ☐ Hospital transport
- ☐ Fatality
- ☐ No treatment
- ☐ Other _____

Work Status
- ☐ Missed work, dates: _____
- ☐ No missed work

Nature of Injury
- ☐ Burn ☐ Inflammation/irritation
- ☐ Bruise ☐ Scratches/abrasions
- ☐ Cut ☐ Sprain/strain
- ☐ Other _____

Body Part Affected _____
☐ Left ☐ Right ☐ Both

Cause of Injury
- ☐ Burned by: _____
- ☐ Cut by: _____
- ☐ Contact with: _____
- ☐ Struck by: _____
- ☐ Needle/Sharp Stick: *Complete additional Exposure Incident Report Form*

Fall/Slip/Trip
- ☐ Different level ☐ Same level ☐ Floor condition
- ☐ Weather condition ☐ Over object ☐ On sidewalk/path
- ☐ On stairs

Blood
Was blood present? ☐ Yes ☐ No
Was Individual exposed to someone else's blood? ☐ Yes ☐ No
Source of other blood? _____

Law Enforcement Response
- ☐ Oregon Tech Public Safety
- ☐ Police

1. **Full Name and Phone Number of any Witnesses:**

2. **What was the Individual's purpose for being on campus?**

3. **What was the Individual doing and where did the incident occur? Describe the activity. *Be specific*:** Example: "Leaving College Union through the south double doors."

4. **What happened? How did the injury/incident occur? *Be specific*:** Example: "There was a tear on the carpet; visitor's shoe got caught on the torn piece of carpet."

5. **What was the injury, illness or incident? Describe the part of the body that was affected and how. Be more specific than "hurt" or "sore".** Examples: "possible strained lower back", "possible sprained left ankle".

6. **What object or substance directly caused the injury? If not applicable, indicate "N/A".** Examples: "slippery floor caused by water", "loose bricks on walkway".

7. **Additional Information:**

Signature: _____ **Date:**_____