Medical Laboratory Technology

STUDENT HANDBOOK ADDENDUM TO HEALTH PROFESSIONS

NORTH IDAHO COLLEGE | Dec. 2022

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OVERVIEW OF PROGRAM

Mission Statement

The Medical Laboratory Technology (MLT) program is designed to prepare qualified medical lab technicians to perform various laboratory procedures, which encompass low, medium, and high complexity testing. The MLT program will include instruction in the laboratory disciplines of microbiology, hematology and hemostasis, medical chemistry, transfusion medicine, urinalysis and body fluids, phlebotomy and lab operations. Coursework will be closely connected with student laboratory opportunities. After the theory for the discipline is completed, clinical internship experiences will be arranged for students in a real-world laboratory environment.

Upon completion of the program, students are eligible to sit for a national certification examination. The certification of choice for most employers is through the American Society of Clinical Pathology (ASCP) Board of Certification. An individual must pass this examination to be eligible for most employment opportunities in medical labs in Idaho and Washington.

The Medical Laboratory Technology Program is a selective admissions program. Ten (10) students are admitted to the program each fall semester for a spring semester cohort start date. The program has prerequisite course requirements, all of which can be accomplished at North Idaho College (NIC) and/or other accredited colleges and universities and can be found on the MLT website www.nic.edu/MLT as well as page 4 of this addendum. The MLT AAS program is a 17-month commitment that covers 4 semesters (including summer). A minimum cumulative grade point average of C+/2.3 is required on all MLT courses and all lab practicals.

Goals

Program outcomes meet or exceed the standards for an accredited educational program in medical laboratory technology, providing a means to evaluate program effectiveness and to assist in making program changes when appropriate.

Goal 1 Students will be clinically competent.

Students will demonstrate the skills necessary to perform entry-level competencies as a medical lab technician with routine medical laboratory tests in areas such as chemistry, hematology and hemostasis, immunology, blood banking, microbiology, urine and body fluid analysis, phlebotomy and laboratory operations.

Goal 2 Students will have appropriate critical decision skills.

Students will demonstrate knowledge in all types of laboratory testing (simple to complex) and will recognize routine and non-routine issues in pre-analytical, analytical, post-analytical lab processes.

Goal 3 Students will exhibit professionalism.

Students will demonstrate professional and ethical behavior by membership and active participation in laboratory, didactic courses and related professional organizations. Students will model professional conduct by respecting the feelings and needs of others, protecting the confidence of patient information, and not allowing personal concerns and biases to interfere with the welfare of patients.

Goal 4 Students will utilize appropriate communication and interpersonal skills.

Students will demonstrate effective communication skills to ensure accurate and appropriate information transfer. Students will professionally and accurately report laboratory results, adapt communication to their audience and work with all members of the healthcare team.

Accreditation Status

NIC's MLT Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Address: 5600 N River Road Suite 720, Rosemont, IL 60018
Phone: 773.714.8800
Fax: 773.714.8886
Email: naaclsinfo@naacls.org
Website: www.naacls.org

Program Outcomes

- Pass Rate:
  The pass rates for the ASCP MLT certification exam were 100% in 2019 and 2020, 87.5% in 2021 and 100% in 2022.
- Completion rate:
  100% of students for the years 2019, 2020, 2021 and 2022 completed the final half of the MLT program,
- Employment rate:
  100% of graduates for the years 2019, 2020, 2021 and 2022 are employed in the field or in a closely related field and/or continued their education within one year of graduation.

Coronavirus (COVID-19)
Updates and Information: www.nic.edu

- Click on the following links for additional information:
  - COVID-19 Dashboard
  - Student Resources

Curriculum Plan – Associate of Applied Science in Medical Lab Technology 72-75 credits

PRE-REQs	Course #	Title	# Credits Total
BIOL	175 **or** 227	Human Biology ***or*** Human Anatomy &Physiology I	4
CHEM	101 **or** 111	Introduction to Essentials of General Chemistry I (4) ***Or*** Principles of General College Chemistry I (5)	5
ENGL	101	English Composition	3
MATH	143	College Algebra	3
			15
SEM 1 (Fall)	**Course #**	**Title**	**# Credits Total**
BACT	250	General Microbiology	4
CHEM	112 **or** 275	Principles of General College Chemistry II (5) ***Or*** Carbon Compounds (3)	3 or 5
COMM	101	Intro to Speech Composition	3
PSYC	101	Intro to Psychology	3
			13-15
SEM 2 (Spring)	**Course #**	**Title**	**# Credits Total**
MLT	100	Phlebotomy	2
MLT	124	Medical Lab Fundamentals	3
MLT	214	Hematology and Hemostasis	4
MLT	222	Basic Concepts in Transfusion Medicine	4
			13
SEM 3 (Summer)	**Course #**	**Title**	**# Credits Total**
MLT	225	Parasitology, Mycology and Virology	2
MLT	218	Medical Chemistry	4
			6
SEM 4 (Fall)	**Course #**	**Title**	**#Credits Total**
MLT	112	Urinalysis and Body Fluids	2
MLT	221	Medical Laboratory Microbiology	4
MLT	224	MLT Student Lab Practice	3
MLT	226	Immunology and Laboratory Operations	4
			13
SEM 5 (Spring)	**Course #**	**Title**	**# Credits Total**
MLT	250	Capstone Seminar and MLT Exam Review	5
MLT	291	Internship I	4
MLT	292	Internship II	4
			13

Medical Lab Technology Courses

MLT-100 Phlebotomy Credit(s): 2
This course presents the theory and procedures for the practice of phlebotomy and waived laboratory testing as it applies to medical laboratory personnel. Phlebotomy and laboratory quality control measures for specimen collection in healthcare facilities will be emphasized throughout this course.

MLT-112 Urinalysis and Other Body Fluids Credit(s): 2
This course is an introduction to the study of urine and body fluid analysis. In includes the anatomy and physiology of the kidney, physical, chemical, and microscopic examination of urine, cerebrospinal fluid, and other body fluids as well as quality control, quality assurance, and safety. Fundamental principles of urine and body fluid analysis with correlation of laboratory methods and practice will also be covered.

MLT-124 Medical Lab Fundamentals Credit(s): 3
This course is an introduction to procedures used in the medical laboratory. Students will learn the application of basic techniques and instruments used in all areas of medical laboratories. These correlate with core MLT courses to include activities for phlebotomy, waived testing, urinalysis, hematology, chemistry, immunology, blood banking and microbiology. Lab: 9 hours per week

MLT-214 Hematology and Hemostasis Credit(s): 4
This course involves the study of blood cells in peripheral blood, bone marrow, and other body fluids. Concepts of normal and abnormal blood cell maturation, physiology, and morphology are examined as well as hemostasis (coagulation). The course is intended to be an introduction to routine laboratory methods and instrumentation with correlation of laboratory observations with disease conditions.

MLT-218 Medical Lab Chemistry Credit(s): 4
This course is an introduction to the basic theory and diagnostic procedures in medical chemistry. Basic principles and theory of biochemical and analytical tests and procedures used in the analysis of clinical specimens will be covered. This course emphasizes the correlation of specimen processing as well as analysis of test results and quality control data.

MLT-221 Medical Laboratory Microbiology Credit(s): 4
This course introduces basic practices and principles of diagnostic microbiology, focusing on pathogenic bacteria encountered in the blood, central nervous system, and genitourinary tract. It includes application of common algorithms for identification of clinically significant pathogens including aerobic gram-positive cocci, gram-negative bacilli, gram-negative cocci, gram-positive bacilli, and anaerobes. The course introduces principles and procedures of immunological and molecular diagnostic techniques and their application to the medical lab.

MLT-222 Basic Concepts in Transfusion Medicine Credit(s): 4
This course is an introduction to the basic theory and concepts of antigen-antibody reaction as they pertain to blood cell transfusions. Blood group antigens and the genetics of their inheritance are

examined. Methods are introduced for performing blood grouping, compatibility testing, and component selection.

MLT-226 Immunology and Laboratory Operations Credit(s): 4
This course offers an overview of the fundamentals of medical lab-related diagnosis and management of disease by immunological and molecular biology laboratory methods. Normal immune function as well as pathological conditions and application to laboratory testing will be covered. Examination aspects of laboratory operations to include quality assessment, troubleshooting, safety, laboratory mathematics, instrumentation and laboratory information systems.

MLT-224 Advanced Medical Laboratory Technology Student Lab Practice Credit(s): 3
This course included advanced practice of laboratory skills and procedures to reinforce theory gained in core MLT courses in preparation for clinical internships. Lab: 9 hours per week

MLT-225 Parasitology, Mycology and Virology Credit(s): 2
This course covers basic theory and clinical procedures used to isolate and identify intestinal, blood, and tissue parasites; dermatophytes, systemic and subcutaneous fungi, viruses, and mycobacteria.

MLT-250 Capstone Seminar and Exam Review Credit(s): 5
This course provides a cumulative review of medical laboratory procedures and theoretical concepts from all phases of laboratory testing. Emphasis is placed on recall and application of theory, correlation, and evaluation of all areas of laboratory science. Upon completion, students should be prepared for national certification examinations. Students will apply their technical knowledge to laboratory case studies and to review major areas of the MLT curriculum with an emphasis on critical thinking skills. Students will have access to practice examination in preparation for certification examinations.

MLT-291 Internship I Credit(s): 4
This course provides the first cooperative learning experience in an affiliated clinical facility. Students will gain their first exposure to the clinical environment in a supervised application of learned theory and practice. Students will experience working with patients and performing procedures required of a medical laboratory technician. Specific detailed learning activities are developed to meet established clinical outcomes. **Internship:** 360 hours over 9 weeks

MLT-292 Internship II Credit(s): 4
This course provides the final cooperative learning experience in an affiliated clinical facility. Students will complete their internship in a supervised clinical setting and apply learned theory and practice. Students will achieve competencies required of a medical laboratory technician. Specific detailed learned activities are developed to meet established clinical outcomes.
Internship: 360 hours over 9 weeks

Affiliation Agreements
Satisfactory completion of the clinical internship is a program requirement and is offered to those students who have satisfactorily completed **all prior MLT course work** with a grade of C+ or better. While every attempt is made to place a student at a local or desired clinical location, all students must be prepared to travel to regional sites that may be outside of Northern Idaho.
Note: Transportation costs, cost of living accommodations, and any clinical site-specific requirements or costs are the responsibility of the students.

If a scheduled clinical internship does not align with the commencement of the academic semester, a student may receive supplemental laboratory assignments. Any qualified student who experiences a delay in their clinical assignment due to the college, will begin their clinical internship when an alternate site becomes available. If this creates a circumstance which would require the student to need additional time beyond the scheduled semester end date, an "Incomplete" may be requested consistent with college policy. Please refer to the college catalog for specific details on "Incompletes."

The clinical internship is 360 hours in length. Site staffing and lab routine/workload may vary by site. Clinical sites will work out times that are mutually acceptable with the understanding that i) we are guests in the clinical environment ii) the clinical sites may schedule last minute to accommodate business operations and iii) clinical sites have final say in scheduling. The following is a current list of North Idaho College clinical affiliates for the MLT program.

Benewah Community Hospital, St. Maries, Idaho
East Adams Rural Healthcare, Ritzville, Washington
Gritman Medical Center, Moscow, Idaho
Interpath Laboratory, Pendleton, Oregon (Various locations including St. Anthony Hospital)
Kootenai Health, Coeur d′ Alene, Idaho
Marimn Health, Plummer, Idaho
MultiCare: Rockwood Clinic, Deaconess Hospital, Valley Hospital, Spokane, Washington
MultiCare: Tacoma General, Tacoma, Washington
Newport Hospital, Newport, Washington
Palouse Medical Center, Pullman, Washington
Providence Medical Group, Spokane Valley, Washington
Shoshone Medical Center, Kellogg, Idaho
St. Alphonsus (Member of Trinity Health), Boise, Idaho
Bonner General Hospital, Sandpoint, Idaho
St. Mary's Hospital and Clinics, Cottonwood, Idaho
Labcorp, Spokane, Washington
Incyte, Spokane Valley, Washington

Idaho and Washington law requires that any person who provides services that involve direct contact with patients and residents at a licensed health care facility be immunized. Students are required to show proof of immunization **prior to internship placement**. Documented negative

2-step TST test (Tuberculosis skin test) is required. Failure to present the required immunization documentation may result in failure to place in internship and failure in the program.

National Certification Exams

After completion of the North Idaho College Medical Lab Technology Program requirements, students will be eligible to take national certification exams. These include:

Medical Lab Technician (MLT) Board of Certification/Eligibility (BOC) American Society of Clinical Pathology (ASCP):

- https://www.ascp.org/content/board-of-certification/get-credentialed

Medical Lab Technician (MLT) American Medical Technologists (AMT) Certification/Eligibility:

- https://americanmedtech.org/Certification/Get-Certified

Medical Laboratory Technician (Generalist) Certification MLT(AAB):

- http://www.aab.org/aab/MLT.asp

Students are encouraged to take their national certification exams as soon as possible after graduation. The cost of one attempt at one certification exam is included within the cost of the program. *Successful completion of the national certification exam is not required to complete the degree program, but is highly recommended for success in the field.*

Scholarships

Please be sure to apply for North Idaho College scholarships:

- http://www.nic.edu/websites/default.aspx?dpt=29&pageId=4226

North Idaho College Foundation Scholarships:

- https://www.nic.edu/websites/default.aspx?dpt=160&pageId=6549

Other scholarships may be available from:

American Society for Clinical Pathology:

- https://www.ascp.org/content/about-ascp/ascp-foundation/providing-scholarships

American Medical Technologists Institute for Excellence (AMTIE):

- https://americanmedtech.org/

Grading Policy

Letter grades for the MLT program will be awarded based on each student's performance on quizzes, exams and assignments administered during each of the MLT courses. The material "builds" in relation with each other, and therefore, learning tools should be regarded as "comprehensive."

Grade	GPA	Definition	
A	**4.00**	**>93**	**Excellent performance**
A-	**3.70**	**90-92**	**Excellent performance**
B+	**3.30**	**87 - 89**	**Good performance**
B	**3.00**	**84 - 86**	**Good performance**
B-	**2.70**	**80 – 83**	**Good performance**
C+	**2.30**	**77-79**	**Adequate performance-MLT *student may continue to next semester – see Program Director to determine how to improve****
C	2.00	74-76	Adequate performance, but not for MLT program**
C-	1.70	70-73	Adequate performance, but not for MLT program**
D+	1.30	67-69	Marginal performance**
D	1.00	60-66	Marginal performance**
F	0.00	< 60	Unacceptable performance**

***To continue in the MLT Program, a final grade of 77%/GPA 2.3 (C+) or higher is required in each course.**

****See Program Director**

Students must pass all courses in their current level of the MLT Program in order to progress to the next level. Progression to the next level of the MLT Program requires:

A grade of **C+ (77.0%)** or better in each MLT course. **Final course** grades **will** be rounded (using the 10th decimal column) to the next whole number. For example: 77.5 becomes 78 and 77.4 will remain at 77.

A grade of "**I**" (incomplete grade) may only be recorded for a student whose work is incomplete due to circumstances beyond the student's control. The "**I**" grade must be removed before the student can progress to the next MLT course. (Refer to https://catalog.nic.edu/ page 28 of the pdf 2022-2023 catalog for the procedure to be followed).

General Education Courses

A. A grade of **C** or better is required for each general education course listed as pre-requisite for the MLT program. A grade of C+ or better is required for MLT courses.

Service Work Participation
The student and the employer understand that there is no expectation of compensation during the internship and no job guarantee thereafter. During the internship, students may be occasionally asked to work hours other than normal scheduled daytime hours during the week. The reason for working "off hours" must be educational in nature. Significant deviations from the scheduled internship must be discussed with the program director. The assignments must be within the framework of the internship rotation in that a "mentor" must be assigned. Only techniques or procedures the student has already attained competency in may be assigned, and evaluation procedures must be completed as usual.

Medical Lab Technology Teach Out Policy
In the unforeseen event that NIC cannot continue to offer the MLT program, students will be notified by email and by the program. NIC's institutional accrediting body, the Northwest Commission on Colleges and Universities (NWCCU), requires that all students currently enrolled in the program be allowed to complete the degree program or be reasonably accommodated to complete the program at another institution. At this point, no future students will be admitted to the program.

Student Handbooks
Your rights and responsibilities as a student of the NIC MLT Program are outlined in the Health Professions Handbook, the MLT Addendum to the Health Professions Handbook and the NIC Student Handbook. The first two documents will be provided at orientation and links will be available to the documents in each MLT course syllabus. The NIC Student Handbook can be found at: https://www.nic.edu/studenthandbook/

Attendance
All labs are mandatory. Makeup labs are available although all activities may not be.

Communications
You must have modern computing capabilities with good internet connectivity in order to access the online didactic course work required for progression through the MLT Program. You must check your student email every 48 hr and respond to all program-specific questions/concerns posed by the program director, faculty of the NIC MLT Program and its supporting staff, in such communications either directly in an email response, by scheduled meeting or via some other mutually agreed upon method. Failure to communicate with the program director, faculty or support staff of the program in a timely manner over program-specific content is grounds for withdrawal from the program.

Occupational Outlook for Medical and Clinical Laboratory Technicians

- Perform routine medical laboratory tests for the diagnosis, treatment, and prevention of disease. May work under the supervision of a medical technologist.
- National estimates for this occupation; industry profile for this occupation; geographic profile for this occupation, go to: https://www.bls.gov/oes/current/oes292012.htm

APPENDICES

The American Society for Clinical Laboratory Science

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.

www.ascls.org

Click on “About Us” and then “Code of Ethics”

NAACLS Requirements

Essential Skills Requirements

- **Observation** – A student must have the ability to participate actively in online activities, lectures, student lab, and clinical internship sessions. He/she must have the ability to see projected images and discriminate color variations in slide and computer format, as well as under a microscope.
- **Communication** - The student must be able to communicate in English with instructors, fellow students, patients, and other members of the health care team. He/she must be able to write and transmit information clearly, accurately, and efficiently.
- **Motor Function** - The student must have sufficient motor function to perform a variety of basic and advanced lab testing. These may include manipulation of a variety of pipettes, microscopes, phlebotomy equipment, lab equipment, and supplies.
- **Intellectual, Conceptual, Integrative and Quantitative Abilities** - The student must be able to master basic science and medical lab information presented in online activities, lecture and lab curriculum. He/she must also be able to measure, calculate, reason, analyze, evaluate and synthesize lab information/data. Problem solving and interpretation of patient laboratory data is critical to all lab practitioners. The student must be able to determine when to seek supervisory help in the medical lab internship setting.
- **Behavioral and Social Skills** - The student must be able to exercise good judgment in the online activities, lecture, lab, and medical lab settings. He/she must be able to complete tasks on time in a mature, sensitive, and effective manner with instructors, classmates, coworkers, patients, and other members of the health care team. He/she must be able to work under both routine and increased workload situations, prioritize tasks, and make correct judgements about patient results. Maintains HIPAA confidentiality at all times. Student must be flexible with scheduling and be able to adapt to the ever-changing environments of the lab. Other professional attributes may include dependability, self-motivation and initiative, maturity, confidentiality and concern for others.

The above technical standards identify the requirements for admission, retention, and graduation of a student in the program. I certify that I have read and understand the North Idaho College MLT Program's Essential Skills. I have been given opportunity to ask questions and have obtained necessary information. I am able to meet each of the essential standards, with or without reasonable accommodation.

Student Name: _____
(Print Clearly)

Student Signature:_____Date: _____

Student Initials: _____

This is a legal document. Please sign with blue or black ink and return to MLT Program Director.

Medical Lab Technology Student Fees

*__***Student Fees are subject to approval on a yearly basis per North Idaho College Fiscal year budget.**__

Semester 3	Course/ Title	Items	Total Fee
	MLT 124 MLT Lab Fundamentals	Phlebotomy ($40.00) Point of Care Testing ($40.00) Hematology ($80.00) Blood Banking ($150.00) Consumables ($30.00) Uniforms ($120.00) Medical Doc Mgr. ($30.00) Criminal BC ($56.00) Disp. Lab Coats ($20.00) CE Online ($20.00) American Society Clinical Laboratory Science Membership ($10.00)	$596.00*
Semester 5	Course/ Title	Items	Total Fee
	MLT 224 Student Lab Practices	CPNW Ed Modules/Grid ($75.00) Microbiology ($250.00) Chemistry ($75.00) Blood Banking ($75.00) Urinalysis & Body Fluids ($75.00) Consumables ($20.00) Name Badge ($4.00)	$574.00*
Semester 6	Course/ Title	Items	Total Fee
	MLT 250 Capstone and MLT Exam Review	MLT National Cert Exam ($220.00) CE exam review online ($80.00) CE materials ($85.00)	$385.00*
	MLT 291/292 Internship I/II	Badges and consumable ($40.00) Clinical Placement Coordinator ($300.00)	$340.00*

North Idaho College

Photo Release

I, hereby give North Idaho College the absolute right and permission to copyright and/or publish, or use pictures and/or video of me, in which I may be included in whole or in part, or composite or distorted in character or form, in conjunction with my own or a fictitious name, or reproductions thereof in color or otherwise, made through any media for publication, printed or electronic advertising, art, trade or any other lawful purpose whatsoever.

I, hereby waive any right that I may have to inspect and/or approve the finished product or the advertising copy that may be used in connection therewith, or the use to which it may be applied.

I hereby release, discharge, and agree to save North Idaho College from any liability by virtue of any blurring, distortion, alteration, optical illusion, or use in composite form, whether intentional or otherwise, that may occur or be produced in the taking of said picture, or in any processing tending towards the completion of the finished product.

Full Name: (print)

_____

Address:

_____

Phone Number:

_____

Email Address:

_____

Model Signature:

_____

Date:

_____

Witness Signature:

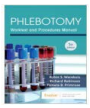
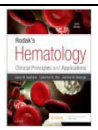
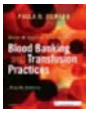
_____

Purpose:

_____

Required/Optional Textbooks for North Idaho College Medical Laboratory Technology Program – updated December 2022

MLT Program Technical Block – Spring I – 2023 (New Cohort)

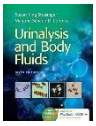
Required Textbook for MLT 100 Phlebotomy Phlebotomy Worktext and Procedures Manual, 5th Edition; 2020, Robin S. Warekois ISBN: 9780323642668 **Offered as part of a bundle for reduced student cost****	 REQUIRED
Required Textbook for MLT 214 Hematology and Hemostasis Rodak's Hematology, 6th Edition, 2020, Elaine Keohane, PhD ISBN: 9780323530453 **Offered as part of a bundle for reduced student cost****	 REQUIRED
Required Textbook for MLT 222 Transfusion Medicine Basic & Applied Concepts of Blood Banking and Transfusion Practices, 5th Edition, 2017, Paula R. Howard ISBN: 9780323430623 **Offered as part of a bundle for reduced student cost****	 REQUIRED
Required Textbook for MLT 124 Med Lab Fundamentals and MLT 224 Linne & Ringsrud's Clinical Laboratory Science, 8th Edition, 2020, Mary Louise Turgeon ISBN: 9780323530828 **Offered as part of a bundle for reduced student cost****	 REQUIRED

****Required Books: North Idaho College_SP22_ML_P**
ISBN: 9780443143274

MLT Program Technical Block – Summer – 2022

Required Textbook for MLT 218 Medical Chemistry Clinical Chemistry Principles, Techniques, Correlations Michael Bishop, 2017 ISBN: 9781496335586	 REQUIRED
Required Textbook for MLT 225 Parasitology, Mycology, and Virology Bailey & Scott's Diagnostic Microbiology, 2018, 14th Edition, Patricia Tille ISBN: 9780323433792	 REQUIRED, Also for Fall

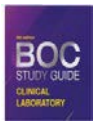
MLT Technical Block - Fall - 2023

Required Textbook for MLT 112 Urinalysis and Body Fluids Urinalysis & Body Fluids, 6 Edition, Strasinger ISBN: 9780803639201 ****Offered as part of a bundle for reduced student cost from NIC Bookstore**	 REQUIRED
MLT 221 Medical Laboratory Microbiology No new textbook; Use MLT 225 required textbook	 REQUIRED, BUT already purchased, MLT 225
Required Textbook for MLT 226 Immunology and Laboratory Operations ****New Bundle FA23: NIC Cardinal Bookstore Package** **978-0803644663 Clinical Immunology & Serology, 4E **978-0803668294 Molecular Diagnostics, 3E	 REQUIRED, New Bundle
MLT 224 MLT Advanced Student Lab Practices No new textbooks	Utilize ALL MLT textbooks from previous semesters

****Required books: NIC Cardinal Bookstore Package** **OR**
Students can save an additional 20% plus free shipping if they purchase this bundle package directly from www.fadavis.com.

Required/Optional Textbooks for North Idaho College Medical Laboratory Technology Program – updated

Spring II (2023)

MLT 250 Capstone Seminar and MLT Exam review • All MLT textbooks from program **Choice:** Clinical Lab Science Review, Jarreau, ISBN: 9780967043425 https://alliedhealth.lsuhsc.edu/cl/reviewbook.aspx **Choice:** BOC Study Guide: Clinical Laboratory Certification Examinations, 6th Edition, ISBN: 9780891896609 Contact Aidan in case she can get you a member discount https://store.ascp.org/productlisting/productdetail?productId=93784743 **Student Choice: bundle** Students can save an additional 20% plus free shipping if they purchase this package directly from www.fadavis.com using the NIC MLT Student Choice Bundle: ISBN13: 978-1-7196-1362-0 • Medical Laboratory Science Review, 5th Edition, Robert R. Harr 2019 ISBN-13: 978-0-8036-6827-0 • Quick Review Cards for Medical Laboratory Science, 2nd Edition, Valerie Dietz Polansky, 2014 ISBN-13: 978-0-8036-2956-1 • Heme Notes, ISBN-13: 978-0-8036-1902-9 © 2014 Spiral Bound	  Student Choice/Recommended   
MLT 291 Internship I All MLT textbooks from program	All textbooks previously purchased!
MLT 292 Internship II All MLT textbooks from program	

https://www.ascp.org/content/docs/default-source/boc-pdfs/boc-us-reading-lists/mlt_imlt_reading_list.pdf?sfvrsn=22

Cardinal Bookstore Link: Please click on the link and follow the directions to check availability of MLT textbooks.

- **https://www.bkstr.com/nicstore/home**

Medical Laboratory Technology Program
Addendum to Attendance Policy Due to COVID
Effective January 2021

Classroom, lab, clinical, externship or internship attendance is expected and considered essential, as the content presented is considered vital to the student's learning. Students are expected to attend planned learning experiences that occur outside the classroom.

Classroom or Lab Absence Makeup:

1. In the event of absence from class or lab, the student is responsible for acquiring the missed content.
2. Extenuating circumstances beyond the student's control may necessitate an absence. If this occurs, the student **must notify the instructor** citing the reason for the absence prior to the start of the scheduled lab experience and arrange for make-up times. Excessive lab absences may result in withdrawal from the program.

Test Absence and Makeup:

3. Tests or quizzes must be made-up on a school day within 48 hours of the scheduled test. Make-up tests completed after the allowed timeframe will have 10% deduction of the total possible points for the test for each additional school day.
4. If a student is isolated or quarantined due to COVID, and practical lab exams need to be made up, the student has 48 hours after they are released to return to campus to schedule the exam with their instructor. If the practical exam is not scheduled within 48 hours, zero points will be given.

Clinical, Externship, or Internship Makeup:

Clinical, externship, or internship (hereinafter, called experiential education) requirements are based on state law, hospital policy and legal agreements between NIC and the facilities.

Attendance is mandatory. Students are responsible for informing the Program Director AND the facility at least one hour prior to the clinical, dental clinic, externship or internship start time. An important component of learning and practicing ethical work behavior includes the student being required to take responsibility for good attendance.

Should excessive clinical absences occur due to COVID, practical competency exams may be administered to make up clinical hours. Clinical absences may not be made up through paid work experiences. Page 12 of the Health Professions Student Handbook states: All student activities associated with the curriculum, especially while students are completing experiential education rotations will be educational in nature. Students will not receive any monetary remuneration during this educational experience.

Students who have excessive absences and do not schedule make-up hours or exams with their instructor, may be terminated from the program or have to retake clinical, externship or internship courses at the next available semester.

The above attendance addendum identifies the program requirements in the event that excessive absences occur due to COVID. If absences occur for reasons other than COVID, all Health Professions attendance policies apply (see the Health Professions Student Handbook). The Addendum to Attendance Policies for the Medical Laboratory Technology program has been reviewed with me and I have been given opportunity to ask questions. I agree to abide by the program attendance policies.

Signed: _____

Printed Name: _____

Date: _____