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### A. Introduction

The Medical Laboratory Science program is a concentration in the major of Applied Health Science. This program prepares students to earn the national credential of MLS (ASCP) and to become a professional medical laboratory scientist.

### **B.** Program Mission

It is the mission of the Medical Laboratory Science program at UW-Parkside to educate students to become highly skilled in laboratory medicine and who will possess those professional qualities necessary for the successful practice of medical laboratory science. Graduates of the program will be prepared to become future leaders in the field.

# C. Program Administration

Glenn George, D.Sc., FACSc, MLS(ASCP)cm - Program Director, Emmanuel Otu, Ph.D. - Dean of College of Natural and Health Sciences Bryan Lewis, Ph.D. - Director of the Center for Health Science John Bennett, Ph.D., J.D. - Academic Director

### D. Faculty

Glenn George, D.Sc., FACSc, MLS(ASCP)<sup>CM</sup> - Chemistry
John Bennett, Ph.D., J.D. - Microbiology, Immunology
Jessica Orlofske, Ph.D. - Parasitology
Heather Hebior, MT (ASCP) - Laboratory Correlations, Exam Preparation
Megan Swanson, MLS(ASCP)<sup>CM</sup> - Hematology, Immunohematology, Body Fluids
Brett Knorr, MLS(ASCP)<sup>CM</sup> - Cellular Morphology
Nicholas Raffa, Ph.D. - Mycology

### E. Staff

Kim Armstrong, Academic Advisor Lisa Lee, Program Assistant for the Center for Health Science Stacie Alberts, Assistant to the Dean

### F. Program Accreditation Status and Outcomes

The University of Wisconsin Parkside is accredited by the National Agency for Accreditation for Clinical Laboratory Science (NAACLS). We received the approval by the NAACLS Board of Directors for a two-year period beginning in April 2022.

The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) is a nonprofit organization that independently accredits doctorate in clinical laboratory science (DCLS),

medical laboratory scientist (MLS), If you have questions about the accreditation process, you can contact NAACLS:

NAACLS 5600 N. River Rd. Suite 720 Rosemont IL 60018-5119

ph: 773.714.8880 info@naacls.org

**MLS Program Outcomes Since 2021** 

	2021	2022
<b>Certification Pass Rate</b>	50%	NA
<b>Graduation and Attrition Rate</b>	75% graduation	100%
<b>Graduate Placement Rates</b>	100%	100%

# G. Program Goals and Educational Objectives

#### PROGRAM GOALS

- Support the goals and mission of the University of Wisconsin Parkside
- Provide an education for MLS students that meets the standards put forth by NAACLS
- Maintain high retention rates
- Earn and maintain accreditation from NAACLS
- Maintain a rigorous academic program that prepares students to pass the ASCP-BOC and provides entry level knowledge and skills for Medical Laboratory Scientists
- Train students to fill the needed positions in clinical labs in southeastern Wisconsin

### **EDUCATIONAL OBJECTIVES**

- Educate students who will be highly skilled in the performance of laboratory medicine.
- Educate students who will be qualified to work in the field of Medical Laboratory Science.
- Provide the necessary didactic and practical education, which will enable the student to successfully compete in the job market.
- Educate students in principles and techniques in all areas of the clinical laboratory and provide practice in laboratory testing so they develop confidence and competence in their abilities.
- Provide instruction and evaluation to help the student achieve the objectives of the curriculum.
- Provide knowledge of disease processes and the correlation of laboratory medicine.
- Provide instruction in laboratory safety, including topics such as standard precautions and the safe handling of biological specimens.
- Help students develop an understanding of medical and professional ethics.

- Guide students to an understanding that the patient is the primary reason for clinical laboratory science and that as professionals there is a need to protect the integrity and confidentiality of laboratory results.
- Professionalism Described in the Clinical Skills Checklist

# H. MLS Competencies

NAACLS Accreditation Standards state that all MLS program must train students to meet or exceed the Entry Level Competencies. The current entry level competencies for a bachelor's degree in an MLS program are:

At entry level, the medical laboratory scientist will possess the entry level competencies necessary to perform the full range of clinical laboratory tests in areas such as Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunohematology/Transfusion Medicine, Microbiology, Urine and Body Fluid Analysis and Laboratory Operations, and other emerging diagnostics, and will play a role in the development and evaluation of test systems and interpretive algorithms.

The medical laboratory scientist will have diverse responsibilities in areas of analysis and clinical decision-making, regulatory compliance with applicable regulations, education, and quality assurance/performance improvement wherever laboratory testing is researched, developed or performed.

At entry level, the medical laboratory scientist will have the following basic knowledge and skills in:

- A. Application of safety and governmental regulations and standards as applied to clinical laboratory science;
- B. Principles and practices of professional conduct and the significance of continuing professional development;
- C. Communications sufficient to serve the needs of patients, the public and members of the health care team;
- D. Principles and practices of administration and supervision as applied to clinical laboratory science;
- E. Educational methodologies and terminology sufficient to train/educate users and providers of laboratory services;
- F. Principles and practices of clinical study design, implementation and dissemination of results.

# I. Program Learning Outcomes

The Learning Outcomes for the MLS program are designed so that students will develop the cognitive, affective, and psychomotor skills to meet or exceed the Entry Level Competencies proscribed by NAACLS.

- 1. Demonstrate knowledge of all pre-analytical, analytical, and post analytical operations.
- 2. Demonstrate knowledge of terminology and medical conditions related to routine testing.
- 3. Demonstrate knowledge of the fundamental principles that are essential for specialty areas of Blood banking, Hematology and Coagulation, Microbiology, Chemistry, Body Fluid analysis, Phlebotomy, and Laboratory Operations.
- 4. Demonstrate proper laboratory skills: Psychomotor development
- 5. Demonstrate safety, quality control and quality assurance.
- 6. Demonstrate professional attitude and behavior (Affective Development) necessary to earn the respect of your peers.
- 7. Demonstrate analytical abilities and problem-solving skills.
- 8. Demonstrate necessary quantitative skills necessary for proper quality control and quality assurance.

### J. Essential Functions of MLS

The MLS profession requires many skills and demands. Students should understand the expectations that will be put on them in this MLS program and in the profession. The following describes a statement of Essential Functions. All students are required to acknowledge these essential functions. The document for essential functions is shown in Appendix A. Students will discuss the contents of the Statement. Each student must sign the document acknowledging that they have discussed the essential functions of an MLS student and of a professional medical laboratory scientist.

# **K.** Admission to the MLS Program

All students are invited to apply for admission to the MLS program. The application process requires the submission of a formal application and completion of several required tasks. The application is shown in Appendix B. Students can apply for admission to the program during the spring of their second academic year. To be accepted, students must complete (or be concurrently enrolled in) all required courses in BIOS, CHEM, MATH, AHS, HESM, and PSYC. Students must be reasonably assured of completing all courses required for graduation (i.e. general education, skills, ethnic diversity, foreign language) by the end of the third academic year.

#### Curriculum

Completion of a Bachelor of Science that includes completion of the Biology, Chemistry and Math requirements is sufficient to enter the MLS Core classes.

There are two elements of Entry Requirements for the MLS program: Curriculum and Obligations. The Curriculum Requirements are detailed in Section L of this Student Handbook. Briefly, students must complete all required courses (48 credits) in BIOS, CHEM, MATH, AHS, HESM, and PSYC. Students must also complete at least 74 of 89 credit hours of the required courses of the Entry Requirements. All courses that are specifically identified on the list must be passed with a grade of C- or higher to be counted.

#### **Obligations**

Students must complete some obligations and to acknowledge the need for future obligations. Current obligations include submitting a Declaration of Major and writing a Personal Statement of Intent. Students must discuss several future obligations and sign a document acknowledging their receipt of such information. The specific items to be completed or acknowledged include: academic requirement of summer courses, Essential Functions statement, background check, drug screening, and vaccinations.

1. Criminal Background Check and Wisconsin Caregiver Background Check Upon admission to the MLS program, successful completion of a criminal background check is required. Should a background check reveal that a student has a history with a criminal charge and/ or conviction, they will be asked to make an appointment with the Academic Director of the MLS program to discuss the implications of this finding on their educational plan. For all criminal background findings, the decision to accept a student for clinical placement will be made by the clinical agency, not the Academic Director. More information on the Wisconsin Caregiver Background Check Law is available at http://www.dhs.wisconsin.gov/caregiver/. Consult with the Academic Director (John Bennett, bennettj@uwp.edu, 262-595-2410, Greenquist 218) with questions specific to this area. A processing fee will be charged for the background check. Additional fees will be charged for students who have resided outside of Wisconsin in the past three years.

### 2. Drug Screen

Students are required to pass a 10-panel urine drug screen prior to placement in a Clinical Rotation site. The purposes of the drug screen are to comply with expectations of area health care agencies, to provide optimal healthcare, and to support NAACLS professional zero tolerance position related to the unlawful use of substances. Students must abide by the drug screen policies of each clinical site to which they are assigned for a Clinical Rotation.

#### 3. Vaccinations

Students must complete immunization requirements by the appropriate deadline. The MLS program reserves the right to require a student to seek advice from healthcare professionals where it is believed that a condition of health would impede his/her progress or jeopardize the health of others. Students must be current with necessary vaccinations. Students are encouraged to keep records of their vaccination history.

- TB (QuantiFERON) within 90 days of orientation date.
- Documentation of rubella vaccination/titer
- Documentation of rubeola vaccination/titer
- Documentation of mumps vaccination/titer
- Hepatitis Documentation/Declination
- Influenza Vaccination (10/1 thru 3/31) Demonstrate vaccination 6 weeks prior to the start of Clinical Rotation
- COVID vaccination and appropriate booster Demonstrate vaccination 6 weeks prior to the start of Clinical Rotation

# L. Course Requirements

The MLS program places a heavy emphasis on science courses. The MLS Core courses begin in the fall of the Third Year. We advise students regarding the proper sequence of courses to complete prior to their Third Year. The following discussion identifies the general graduation requirements for the University of Wisconsin Parkside and the requirements for completion of the MLS program.

#### **Graduation Credit Requirements**

In order to graduate from the University of Wisconsin Parkside, students must complete a credit requirement, a residency requirement and an Upper-Division credit rule. A minimum of 120 credit hours are required to graduate. All students must earn a minimum of 30 credits of their final 60 credits for their bachelor's degree from the University of Wisconsin-Parkside. Finally, Degree seeking students must earn a minimum of 36 credits in courses numbered 300 or above.

General Education Requirements. The General Education program learning goals are Communication, Reasoned Judgment, and Social and Personal Responsibility. Students must complete 12 credit hours in each of the following areas: Humanities and Arts, Social and Behavioral Sciences, and Natural Sciences. At least three credits of Ethnic Diversity (DV) approved courses must be complete. Students must also complete the Skills Requirement (Composition and Reading, and Computational Skills) and a Foreign Language requirement. The MLS Entry Requirements listed in the MLS 4-Year Plan include all courses and requirements that students must complete for graduation.

### MLS 4-Year Plan - Course Sequence

The following figure shows a proposed 4-year plan for a student. During the first two years, students complete all the Biology, Chemistry and Math courses required for entry to the MLS program. Students are allowed to complete no more than 15 credits of general education courses upon admission to the program.

	FALL				SPRING	
Course	Title	Credits		Course	Title	Credits
BIOS 101	Bioscience (NS)	4		BIOS 102	Organismal Biology	4
MATH 111	College Algebra	4		MATH 114	College Algebra II	
ENGL 101	English Composition	3		XXX	General Education (HU)	3
AHS 101	Introduction to AHS	3		XXX	General Education (SB)	3
PSYC 101	Intruduction to Psychology (SB)	3			Total	15
	Total	17				
Course	Title	Credits		Course	Title	Credits
BIOS 105	Anatomy and Physiology I	5		BIOS 106	Anatomy and Physiology II	5
BIOS 210	Biostatistics	4		CHEM 102/1	General Chemistry II	5
CHEM 101/	General Chemistry I (NS)	5		BIOS 260	Genetics	4
,	General Education (HU)/ DV	3		AHS 300	Introduction to MLS	3
	Total	17			Total	17
			THIRD YEAR			
Course	Title	Credits		Course	Title	Credits
AHS 310	Clinical Microbiology I	2		<b>HESM 280</b>	Sports and Fitness Nutrition (NS)	3
AHS 320	Clinical Immunology I	3		HESM 270	Lifetime Wellness (SS)	3
AHS 335	Clinical Chemistry I	3		AHS 336	Clinical Chemistry II	3
HS 340	Hematology and Hemostasis I	3		AHS 341	Hematology and Hemostasis II	2
XXX	General Education (SB)	3		AHS 400	Immunohematology	2
XXX	General Education (HU)	3		XXX	General Education (HU)	3
	Total	17				
					Total	16
	SUMMER					
Course	Title	Credits				
AHS 401	Immunohematology II	2				
AHS 405	Cellular Morphology	2				
AHS 406 Clinical Fluid Analysis		2				
	Total	6				
			FOURTH YEAR			
Course	Title	Credits		Course	Title	Credits
AHS 321	Clinical Immunology II	2		AHS 311	Clinical Microbiology II	3
AHS 420	Laboratory Operations	2		AHS 450	Clinical Correlations / BOC Prep	2
AHS 495	Clinical Practicum I	5		AHS 496	Clinical Practicum II	4
AHS 350	Diagnostic Molecular Biology	3		AHS 410	Mycology Virology and Parasitology	3
	Total	12			Total	12

### **MLS Entry Requirements**

Students must complete most of their graduation requirements prior to entering the MLS program and taking courses in the Third Year of the program. Students must be reasonably certain to complete all graduation requirements by the end of the Third Year. To accomplish this goal, we established absolute requirements and tentative requirements.

Students must have a solid background in math and science to successfully complete the MLS Core courses. For this reason, all the following must be completed for students to enroll in the MLS Core sequence that begins in the Third Year.

Tentative requirements. Students must have no more than 15 outstanding credits to complete in their Third Year. The curriculum of MLS courses in the Third Year allows space for students to take up to 15 credits of courses not identified as Required for Entry (rfe).

Students must complete all required courses and all but 15 credits of other graduation requirements. The construction of the Third year allows for student to take up to 15 credits of courses other than their Core MLS courses

Applicants to the MLS program are expected to fulfill the university admission requirements. Applicants must complete 90% of the MLS entry requirements to begin the MLS Core classes, The MLS Core courses being in what is traditionally recognized as the 3rd year of college. The following is a listing of all courses that students must complete prior to graduation. The majority of these must be completed prior to acceptance to the MLS program. Many of these classes are Required for Entry, thus are noted with (rfe) next to the credits.

OS 101 Bioscience				
Organismal Biology	4 cr (rfe)			
Human Physiology and Anatomy I <sup>a</sup>	5 cr			
Human Physiology and Anatomy II <sup>a</sup>	5 cr			
Biostatistics <sup>b</sup>	4 cr (rfe)			
Genetics	4 cr (rfe)			
General Chemistry I <sup>c</sup>	4 cr (rfe)			
General Chemistry Lab <sup>c</sup>	1 cr (rfe)			
General Chemistry II <sup>d</sup>	4 cr (rfe)			
General Chemistry Lab II <sup>d</sup>	1 cr (rfe)			
College Algebra I	4 cr (rfe)			
College Algebra II with Trigonometry <sup>e</sup>	5 cr (rfe)			
Lifetime Wellness	3 cr			
Sport and Fitness Nutrition	3 cr			
Introduction to Applied Health Sciences	3 cr			
AHS 300 Introduction to Medical Laboratory Science				
Introduction to Psychology	3 cr			
General Education - Humanities & Arts 12d				
General Education - Social & Behavioral Sciences				
Skills – Composition and Reading 3 cr				
Foreign Language Requirement 8 cr				
Total Credits for MLS Entry Requirements 89cr				
	Organismal Biology Human Physiology and Anatomy I <sup>a</sup> Human Physiology and Anatomy II <sup>a</sup> Biostatistics <sup>b</sup> Genetics General Chemistry I <sup>c</sup> General Chemistry Lab <sup>c</sup> General Chemistry II <sup>d</sup> General Chemistry Lab II d College Algebra I College Algebra II with Trigonometry <sup>e</sup> Lifetime Wellness Sport and Fitness Nutrition Introduction to Applied Health Sciences Introduction to Medical Laboratory Science Introduction to Psychology ation - Humanities & Arts ation - Social & Behavioral Sciences osition and Reading tage Requirement			

<sup>&</sup>lt;sup>a</sup>Students may substitute BIOS 300/341/342 or BIOS 300/341 for BIOS 105/106 sequence

gMLS students may need 1 credit of Natural Science in addition to BIOS 101, CHEM 101, and HESM 280. NOTE: I will apply for a waiver to exempt MLS students from this 1 credit. They are obligated to take CHEM 103, but don't get credit.

### **Core Requirements**

<sup>&</sup>lt;sup>b</sup>Students may substitute PSYC 250 (Psychology Statistics) for BIOS 210.

<sup>&</sup>lt;sup>c</sup>Students may substitute CHEM 115 for CHEM 101/103.

<sup>&</sup>lt;sup>d</sup>Students may substitute CHEM 215 for CHEM 102104

<sup>&</sup>lt;sup>e</sup>Students may substitute MATH 112/113 for MATH 114

<sup>&</sup>lt;sup>f</sup>MLS students need 6 credits of Social & Behavioral Sciences in addition to PSYC 101 and HESM 270.

Students who are accepted to the program are allowed to register for MLS courses. Students are expected to take all courses offered for their cohort. Courses begin during the fall semester of their Third Year. Students are required to take 6 credits of MLS courses during the summer term prior to their Clinical Rotation. These courses provide students with additional content needed for a successfully clinical lab rotation. During the Fourth Year, students complete their Clinical Rotation and enroll in supplemental courses.

# M. Course Descriptions

### **MLS CORE COURSES**

AHS 310: Clinical Microbiology I (Lecture and Laboratory)

2 cr.

A study of the microorganisms associated with human infectious processes. Discussions include the characteristics, isolation, identification, antimicrobial techniques and clinical infections associated with pathogenic microorganisms. Techniques are practiced in the teaching laboratory. Prereq: AHS 101; BIOS 101 and 102, or BIOS 105 and 106, or BIOS 300 and 341; BIOS 210, BIOS 260; CHEM 115; MATH 114 or Math 112 and 113.

### **AHS 311**: Clinical Microbiology II (Lecture and Laboratory)

3 cr.

This course includes advanced topics in microbiology, including antibiotics and antimicrobial susceptibility testing, mycobacteriology, anaerobic bacteriology, fastidious microorganisms and the clinical aspects of microbiology. Techniques are practiced in the teaching laboratory. Prereq: AHS 310.

### **AHS 320**: Clinical Immunology I (Lecture and Laboratory)

3 cr.

A study of clinical immunology concentrating on immune system functions, relationships and responses to infection and disease. Vaccine strategies and basic immunological assessment techniques are included. Prereq: AHS 300, AHS 310.

### **AHS 321:** Clinical Immunology II (Lecture and Laboratory)

2 cr.

An advanced study of clinical immunology concentrating on diseases of the immune system such as immunodeficiencies, infectious diseases and autoimmune conditions. Immunodiagnostic methods and diagnostic strategies are included. Donor selection, recognition of transplant related conditions. Prereq: AHS 320.

### AHS 335 / CHEM 335: Clinical Chemistry I (Lecture and Laboratory)

3 cr.

Study of biological samples, analytes, and assays pertinent to the clinical laboratory. Topics include electrolyte, carbohydrate, protein, lipid, vitamin, and mineral analytes and the techniques utilized to detect and quantify such materials. Prereq: AHS 300, CHEM 215.

**AHS 336 / CHEM 336:** Clinical Chemistry II (Lecture and Laboratory)

3 cr.

Study of metabolism and diagnostic procedures for analysis of metabolism and human disease. Analysis of data for indicators of common pathophysiology and human disease markers. Prereq: AHS 335 / CHEM 335.

AHS 340: Hematology and Hemostasis I (Lecture and Laboratory) 3 cr. of hematology and hemostasis diagnostic procedures, interpretation, and correlation of laboratory findings with disease states. Topics include hematopoiesis, cell morphology, anemias, hemoglobinopathies, myelodysplastic syndromes, coagulation and platelet disorders, and bleeding abnormalities. Prereq: AHS 300, CHEM 215; BIOS 101 and 102, or BIOS 105 and 106, or BIOS 300 and 341; BIOS 260.

### AHS 341: Hematology and Hemostasis II (Lecture)

2 cr.

Theory of hematology and hemostasis diagnostic procedures, interpretation, and correlation of laboratory findings with disease states. Topics include lymphoproliferative and myeloproliferative disorders, immunoproliferative disorders, malignant lymphomas. Prereq: AHS 340.

### AHS 350: Diagnostic Molecular Biology (Lecture)

3 cr

A basic study of medical genetics including the structure, function, and synthesis of DNA, RNA, and involved proteins; the mechanism of inheritance; and medical genetics. The study of molecular biology techniques and their applications is included as well as the laboratory diagnosis of disease. Discussions on ethics and emerging technologies are also included. Prereq: AHS 320, AHS 340, AHS 335 / CHEM 335.

### **AHS 400:** Immunohematology I (Lecture)

2 cr.

Introduction to the different human blood groups, blood components, the antibody screening and identification process, transfusion protocols, blood donor screening, and regulatory concerns of modern blood banking. Prereq: AHS 310, AHS 320, AHS 335 / CHEM 335, AHS 340.

### AHS 401: Immunohematology II (Laboratory)

2 cr.

Initial laboratory experience in blood banking practices including blood typing, antibody screening, antibody identification, cross matching, and confirmatory testing. Prereq: AHS 400.

### **AHS 405**: Cellular Morphology (Laboratory)

2 cr.

An advanced study of the blood and blood cells in abnormal or malignant states, to include discussions on Red Blood Cell and White Blood Cell disorders. Specialized hematology procedures are performed in the teaching laboratory, with an emphasis on the microscopic evaluation of abnormal blood cell morphology, evaluation of complete blood count data along with cytochemical and molecular testing will be reviewed. AHS 311, AHS 321, AHS 336 / CHEM 336, AHS 341, AHS 400.

AHS 406: Clinical Fluid Analysis (Lecture and Laboratory) 2 cr. Introduction to Urinalysis, review of the anatomy and physiology of the kidney, role of the kidney in disease; physical, chemical and microscopic properties of urine; and clinical correlation of lab results. The physiology, specimen collection, processing and analysis of other body fluids. Prereq: AHS 311, AHS 321, AHS 336 / CHEM 336, AHS 341, AHS 400.

**AHS 410**: Clinical Mycology, Parasitology, and Virology (Lecture and Laboratory) 3 cr. The study of clinically relevant fungal, parasitic, and viral pathogens with an emphasis on diagnostic forms. Laboratory exercises will focus on identification of the microorganisms, interpretation of findings and clinical correlation. Prereq: AHS 311, AHS 321, AHS 401.

### **AHS 420:** Laboratory Operations (Lecture)

2 cr.

A study of the basic principles of clinical laboratory management, including theory and practice. Topics will include personnel and financial management, regulation and accreditation, information management, quality assurance, quality control, clinical and continuing education. Prereq: AHS 400, AHS 405, AHS 406, AHS 494.

AHS 450: Clinical Correlations and Board of Review Test Preparation (Lecture) 2 cr. Students will utilize case studies to learn to evaluate patient histories and correlate laboratory test results to specific disease diagnosis. The students will also have an organized class-led study group for the preparation of taking the ASCLS MLS certification exam. Prereq: AHS 400, AHS 405, AHS 406, AHS 494.

#### **AHS 495:** Clinical Practicum I (Medical Laboratory Sciences)

5 cr.

This course is an experiential learning course for clinical laboratory sciences. At clinical affiliate sites, students will rotate through each clinical laboratory department,

Hematology/Coagulation/Body Fluid Analysis, Clinical Chemistry, Microbiology, and Blood Bank. The course will also provide some phlebotomy practice exposure. Prereq: AHS 400, AHS 405, AHS 406.

**AHS 496:** Clinical Practicum II (Medical Laboratory Sciences)

4 cr.

This course is an experiential learning course for clinical laboratory sciences. At clinical affiliate sites, students will rotate through each clinical laboratory department, Hematology / Coagulation / Body Fluid Analysis, Clinical Chemistry, Microbiology, and Blood Bank. The course will also provide some phlebotomy practice exposure. Prereq: AHS 495.

### N. Policies and Procedures

### 1. Advising

The MLS program is part of the AHS department, which uses professional Advisors (Kim Armstrong and Mary Beuscher) to meet with students and assist with course choices and sequencing. Upon admission to the MLS program, students work with John Bennett (Academic Director) as their advisor.

Advising students in the MLS program is conducted with confidentiality and impartiality. All faculty members and academic advisors at the University of Wisconsin Parkside are required to follow the rules set forth by FERPA. The rules are posted on the Registrar's website. In general, all faculty members must maintain personal student information confidentially. To ensure that faculty members follow the rules and guidelines of the school, all take part in annual training related to maintaining confidential information.

Faculty members of the MLS program shall treat all students equitably, and our evaluations of learning achievements are impartial based on demonstrated performance of cognitive, psychomotor, and affective learning.

## 2. Progress in the Program

Students receive regular input from the program regarding their progress. Students can follow their progress through regularly posted scores for assignments, quizzes, and exams. Final grades for each course are posted within five days of the end of final exams for the term.

### 3. Clinical Placement

Overview of Clinical Experiences

As part of the educational program, MLS students participate in a clinical experience. These experiences take place in clinical labs of hospitals. Upon completion of the program, students will have all experiences necessary to become an entry-level medical laboratory scientist.

### 4. Code of Behavior

The MLS program requires students to engage in diverse, complex, and specific experiences critical to the acquisition and practice of essential laboratory professional skills and functions. Unique combinations of cognitive, affective, psychomotor, physical, and social abilities are required to satisfactorily perform these functions. These functions are necessary to ensure the health and safety of patients, self, fellow students, instructors, and other healthcare providers.

#### Affective Skills

Students must show respect for self and others and project an image of professionalism, including appearance, dress, and attendance. Students must possess attributes that include compassion, empathy, altruism, integrity, honesty, responsibility, and tolerance.

### Appearance

The goal is to create a patient experience that instills confidence. How we dress, our grooming, and identification have a major influence on how patients perceive their experience with us. Proper clothing is required in the laboratory and especially in the clinical setting. Dress code violations will result in a verbal warning, while repeated infractions will be referred to the Center for Health Studies Director.

- Legs should be covered.
- Impermeable, closed toed shoes.
- Hair should be secured or styled to prevent test interference and safety issues. Hair should be of natural color. Facial hair should be clean and trimmed/styled.
- Jewelry cannot prevent a safety hazard. No facial jewelry or other body piercings can be displayed. Only one set of earrings allowed.
- No artificial nails. Fingernails are to be well manicured and of a length that will not interfere with testing or PPE.
- A single small tattoo, no larger than 2" x 2", is allowed on the leg, ankle, and feet. Any tattoo that does not meet the above criteria must be covered by clothing at all times. Any showing tattoo must not be disruptive or offensive and not be in conflict with our Values.
- Strong perfumes, colognes, and other scents may not be worn. Strong is defined
- as any scent that can be detected at a distance of 3 feet.

Clinical sites may impose their own regulations. Students should learn the requirements of each Clinical Rotation site as a part of making an informed choice during the Placement process. Students who fail to adequately meet the regulation of the Clinical site may be removed and disciplined.

#### Attendance

Regular attendance in all classes is required. It is the obligation of the student to contact all instructors regarding absences. If you are ill or a family emergency arises, please contact the your instructor and speak to someone regarding your absence before the scheduled start time. Leave a message if there is no answer. A no call, no show will result in a written warning – one step away from dismissal. All absences and punctualities will be documented and an excessive amount any of these infractions will be addressed. Any changes in schedule must be arranged with the Academic Director.

### Safe Professional Practice in Clinical Settings

Students are expected to demonstrate patterns of professional behaviors which follow the legal and ethical codes of laboratory practice; promote the actual or potential well-being of clients, health-care workers, and self in the biological, psychological, sociological, and cultural realms; demonstrate accountability in preparation, documentation, communication, and continuity of care; and show respect for the human rights of individuals. A student whose pattern of behavior is found to be unsafe may be terminated from a clinical practicum for reason of unsafe practice at any time during the semester. If the behavior is identified before the drop date, the student will

be directed to drop. If the drop date has passed, the student will receive a grade of F for the course. In order to continue in the MLS program, a student who is terminated from a clinical practicum must appeal to the Director for the Center of Health Sciences for readmission to the MLS program.

# 5. Grievance and Appeals

Grievance Procedure

The MLS program has a formal written grievance procedure, available in the office of the Center for Health Sciences (GRNQ 301). A grievance is defined as any situation affecting the status of a student in which the student believes his/her rights have been compromised or denied because of an erroneous or arbitrary interpretation or application of rules. Student grievances are reviewed by the Director for the Center of Health Sciences and the AHS Steering Committee, which recommends the disposition of the grievance to the associate dean for academic affairs. In addition, this committee reviews and acts upon all cases of academic misconduct as described in the University of Wisconsin Parkside web site dealing with Conduct Process (https://www.uwp.edu/live/offices/studentaffairs/conduct.cfm)

### 6. Probation and Dismissal from Program

Every student is required to maintain a minimum of a C average (cumulative GPA of 2.0 (on a 4.0 scale) on all work attempted in each semester or summer session. Failure to meet this minimum GPA will automatically result in a status of academic probation.

Students can be dismissed from the program for falling below GPA = 2.0 for two successive semesters. Students may petition to rejoin the program after one semester. Students who return to the program after a successful appeal must keep their GPA above 2.0 otherwise, they will be dismissed from the program with no further chance of appeal.

### 7. Student Work

Students should not be used in the clinical laboratory to perform testing in place of professional staff. Students should always be performing testing under supervision of a clinical instructor. Any work that may be performed by students should be non-compulsory and take place outside of the regular academic hours.

## O. Grading

All courses in the MLS Core must be passed with a minimum grade of 70% (C-). This includes courses in the Clinical Rotation. Each course in the MLS Core is required for continuing in the program. University policy will be followed for incompletes and withdrawals.

Faculty reserve the right to maintain a confidential and secure pool of examination questions from year to year. This means that students may not keep their examinations. Examinations are available to review in faculty offices until the end of each course.

# P. Graduation

University policy that the following must be accomplished to receive a Bachelor of Science degree.

- 1. Complete 120 credits of college work. This must include 36 credits in courses numbered 300 or above. Certain elementary courses are identified in the catalog and/or course schedule as not counting toward the 120 credits required for graduation. In addition, only the first 8 credits of physical education activity courses (100 level) may be counted toward graduation or grade point averages (GPA).
- 2. Of the 120 credits required for graduation, students must complete at least 30 credits of work at UW Parkside. Students must complete all course work to be counted toward graduation by the end of the semester in which they graduate.
- 3. Attain a minimum cumulative grade point average (GPA) of 2.00 on a 4.00 scale. Some programs have higher GPA requirements. Transfer students must also have a cumulative 2.00 GPA on the combination of transfer credits accepted and credits attempted at UW-Parkside.
- 4. Complete an approved major program of study with the minimum major GPA as specified by the program or department. Usually, the minimum GPA is 2.00 on a 4.00 scale, but some majors require a higher GPA. Students who apply transfer credits to their majors must also meet the minimum major GPA requirement on the combination of transfer credits and credits from the University of Wisconsin Parkside. At least 15 credits of upper-level course work (courses numbered 300 or higher) must be completed at UW-Parkside. A student may not graduate with an incomplete grade in major course work if failure in that course would reduce the GPA in the major below the minimum GPA.
- 5. Meet UW-Parkside general university requirements.
- 6. File a request for a degree summary/application to graduate and pay the required application fee. The degree summary process is the way in which students obtain institutional and departmental approval of their petition to graduate.
- 7. Students graduate from the University of Wisconsin Parkside based on satisfactory completion of the above-listed requirements. Students are not required to pass, or even sit for the ASCP-BOC in order to receive their degree.

# **Q.** ASCP-BOC Exam (Certification Exam)

Students who graduate from the University of Wisconsin Parkside, having received a Bachelor of Science degree, are eligible to take the national certification exam. The ASCP-BOC is the Board

of Certification exam from the Society for Clinical Pathology. <a href="http://www.ascp.org/Board-of-Certification">http://www.ascp.org/Board-of-Certification</a>

The MLS program does not require students to take or pass the ASPC-BOC. Students take the exam after graduation from the University of Wisconsin Parkside MLS program. Our program does not mandate any specific outcome.

# **R.** Professional and Community Organizations

Students are encouraged to participate in professional organizations. A local chapter of the ASCLS hosts meetings every other month and students attendance is free. Contact information for the Racine/Kenosha branch of the ASCLS is:

- Shahla Anders sawan@uwm.edu
- Toni Kuehl Toni.Kuehl@froedtertsouth.com

### S. Clinical Rotation

### 1. Clinical Partners

### **ACL (Advocate Aurora Clinical Labs)**

Aurora West Medical Center 8901 W. Lincoln Avenue West Allis, WI 53227 (414) 328-6121 Clinical Liaison – Marzena Horembala, SBB<sup>ASCP</sup>

#### **Ascension All Saints Hospital**

3801 Spring Street Racine, WI 53405 (262) 687-6613 Clinical Liaison – Brett Knorr, MLS<sup>ASCP</sup>

### Froedtert South, Inc. (Froedtert Pleasant Prairie Hospital)

9555 76<sup>th</sup> St. Pleasant Prairie, WI 53158 (262) 577-8000 Clinical Liaison – Heather Hebior, MLS(ASCP)CM

### 2. Expectations and Policies

#### The Program and Process

Students will be placed a clinical laboratory to complete their Clinical Rotation. This process will take over 20 weeks and will fill both semesters during the fourth year. The Clinical Rotation

begins in the fall semester of the fourth year. During the Clinical Rotation, students will have learning experiences that involve:

- Blood banking
- Body Fluids
- Chemistry
- Hematology and Coagulation
- Laboratory Operations
- Microbiology
- Phlebotomy

The precise sequence of learning experiences will vary with each student and with each clinical site.

Students have academic requirements during their Clinical Rotation. In the fall semester, AHS 321, AHS 350 and AHS 420 are required. During the spring semester, students will enroll in AHS 311, AHS 410, and AHS 450. All these courses require regular reading, completion of homework and exams. For this reason, students are not allowed in the Clinical Rotation if they have any outstanding coursework to complete that is not listed in this paragraph.

It is a policy of the MLS program that students are not allowed to enroll in any non-MLS courses during their clinical experience semester. No exceptions will be granted to this policy.

### **Student Obligations**

Students must complete some obligations and to acknowledge the need for future obligations. Current obligations include submitting a Declaration of Major and writing a Personal Statement of Intent. Students must discuss several future obligations and sign a document acknowledging their receipt of such information. The specific items to be completed or acknowledged include: academic requirement of summer courses, Essential Functions statement, background check, drug screening, and vaccinations.

1. Criminal Background Check and Wisconsin Caregiver Background Check Upon admission to the MLS program, successful completion of a criminal background check is required. Should a background check reveal that a student has a history with a criminal charge and/ or conviction, they will be asked to make an appointment with the Academic Director of the MLS program to discuss the implications of this finding on their educational plan. For all criminal background findings, the decision to accept a student for clinical placement will be made by the clinical agency, not the Academic Director. More information on the Wisconsin Caregiver Background Check Law is available at http://www.dhs.wisconsin.gov/caregiver/. Consult with the Academic Director (John Bennett, bennettj@uwp.edu, 262-595-2410, Greenquist 218) with questions specific to this area. A processing fee will be charged for the background check. Additional fees will be charged for students who have resided outside of Wisconsin in the past three years.

### 2. Drug Screen

Students are required to pass a 10-panel urine drug screen prior to placement in a Clinical Rotation site. The purposes of the drug screen are to comply with expectations of area health care agencies, to provide optimal healthcare, and to support NAACLS professional zero

tolerance position related to the unlawful use of substances. Students must abide by the drug screen policies of each clinical site to which they are assigned for a Clinical Rotation.

#### 3. Vaccinations

Students must complete immunization requirements by the appropriate deadline. The MLS program reserves the right to require a student to seek advice from healthcare professionals where it is believed that a condition of health would impede his/her progress or jeopardize the health of others. Students must be current with necessary vaccinations. Students are encouraged to keep records of their vaccination history.

- TB (QuantiFERON) within 90 days of orientation date.
- Documentation of rubella vaccination/titer
- Documentation of rubeola vaccination/titer
- Documentation of mumps vaccination/titer
- Hepatitis Documentation/Declination
- Influenza Vaccination (10/1 thru 3/31) Demonstrate vaccination 6 weeks prior to the start of Clinical Rotation
- COVID vaccination and appropriate booster Demonstrate vaccination 6 weeks prior to the start of Clinical Rotation

#### **MLS Cannot Guarantee Clinical Placement**

Placement in the Clinical Rotation is a competitive process in which students apply to be placed in the laboratory of one of our clinical partners. Selection for placement is prerogative of the lab manager of the clinical partner and is based on student performance in the classroom and in interviews. The MLS program does not guarantee that a student can earn placement in the clinical lab of their choice.

Our effort to place is student is not a guarantee that the student will earn a placement in a Clinical Rotation. We limit the enrollment in the MLS program based on the number of Clinical Rotation placements that we have been offered by our clinical partners. Under some circumstances that are out of the control of the MLS program, it is possible that a clinical partner is no longer able to provide training to as many students as originally planned, leading to a shortage of placements. Because such circumstances are out of the control of the MLS program, we cannot guarantee every student that they can earn a placement for Clinical Rotation. Under such circumstances the MLS Program Director is required to conducted the following actions.

- Offer clinical placements to students based on class rank as determined by:
  - o First, grade point average in the MLS Core courses.
  - If a tie-breaker is required, the second ranking process will consider the grade point average of the most recent 60 credits completed at the University of Wisconsin Parkside. Students who have not completed 60 credits cannot be considered for this criterion.
- Contact other Clinical Liaisons to discuss the feasibility of
  - o Hosting the student for a complete Clinical Rotation
  - o Developing a shared Clinical Rotation between multiple labs
- Contact regional clinical labs to determine the potential to host the students form some component of clinical training

• If, and only if, an appropriate placement cannot be found, the student shall be given priority ranking for clinical placement in the following cohort.

The MLS program will make every effort to find a suitable placement for a student to conduct their Clinical Rotation in a manner that allows the student to complete the required training and graduate on time.

#### **Clinical Schedules**

During the Clinical Rotation, students will be required to attend their placement on a full-time basis. The typical schedule for a clinical experience is 7:00 am to 4:00pm. Times may vary for each clinical placement site and even for each area of specialization. Students may be scheduled for "second shift" (3:30pm – 11:00pm) for one to two weeks during their placement. Students will be fully informed of these schedules well enough in advance to make personal arrangements.

### **Expectations**

Students are responsible for arriving in each department fully prepared to learn. This means each student must arrive with the appropriate department Clinical Competencies, Clinical Evaluations, and all related student materials. Clinical Evaluations will be completed by each department.

It is the responsibility of the student to read the department policies and procedures that correspond to the daily methodologies to be performed in the laboratory.

Some departments may have internal quizzes, case studies, reading, and work problems. Students are expected to take all graded material seriously. Students earning a grade lower than 70% in their work can be dismissed from the program.

Daily attendance is required. Students must be in their assigned laboratory section ready to begin work at their assigned start time. All absences and punctualities will be documented, and an excessive amount of these infractions will be addressed.

Students must show respect for self and others and project an image of professionalism, including appearance, dress, and attendance. Students must possess attributes that include compassion, empathy, altruism, integrity, honesty, responsibility, and tolerance.

### **Completion**

Students must complete the assigned work in all departments and areas of specialization. Work must be performed at a satisfactory level to be considered complete.

Clinical instructors will complete evaluation checklists for each student. The checklists provide a summary of each student's performance in that clinical department. It is the discretion of the Clinical Instructor as to whether the student has completed work in a satisfactory manner.

#### **Termination**

The clinical course of study may be terminated prior to graduation for any of the following reasons:

- Failure to maintain a grade level of 70% in classroom or practical instruction.
- Failure to comply with program, hospital, or clinical policies.
- Documented evidence of academic misconduct.
- Attendance or punctuality requirements are not met.
- A single breach of confidentiality.
- Conduct or health that threatens the health, safety or welfare of patients, staff or operations at the facility.
- Voluntary withdrawal.

### **Policy Regarding Potential Program Closure**

The University of Wisconsin Parkside plans to maintain the MLS program indefinitely. However, the administration of the program acknowledges the possibility that future situations and conditions might lead to a decision to close the program. In such a circumstance, the administration of this program puts forth a policy to protect students enrolled in the MLS program. The following steps shall be initiated by the Program Director or the Associate Dean of the College of Natural and Health Sciences.

- 1. Notify NAACLS of pending closure. Information to be disclosed shall include: timeline for closure, rationale/basis for the closure, number of students affected by the closure, plans to assist students affected by the closure.
- 2. Notify the Admissions Office to prevent additional student recruitment to the program.
- 3. Implement a plan to allow students enrolled in Year 4, Clinical Rotation, of the MLS program to complete their work and graduate. Notify all Clinical Liaisons to ensure that students can continue their training through the end of the academic year.
- 4. Implement a plan to allow students enrolled in Year 3, MLS Core, of the MLS program to complete their didactic work. The Program Director will work with Clinical Liaisons in an effort to allow students to complete their training during Year 4. If the University of Wisconsin Parkside will not support the administration of courses needed to allow students to graduate, the Program Director shall contact other regional, accredited institutions to find opportunities for the student to gain enrollment and complete the needed training. The Program Director shall contact other regional clinical laboratories to find opportunities for placement of students for Clinical Rotation.

### **Policy Regarding Temporary Closure of Facilities**

If circumstances cause the loss of our ability to use the physical facilities at the University of Wisconsin Parkside due to unforeseen catastrophe, the MLS program administration will take the following steps to guarantee that all students can continue their education.

1. We are arranging partnerships with other schools in the area that will allow our students to continue essential courses. These partnerships include schools in the near vicinity:

- a. schools within 10 miles Gateway Technical College MLT program, Carthage College
- b. schools within 25 miles University of Wisconsin Milwaukee, Marquette University
- c. schools at a greater distance, especially if such a school is near the residence or one of our students.
- 2. We will notify NAACLS of the hardship and seek input.

# T. Student Honor Code and ASCLS Code of Ethics

#### **MLS Student Honor Code**

Members of the Medical Laboratory Science Program are expected to engage in behavior that promotes the continuous development and improvement of student's academic experience. Honesty and integrity inside and outside the classroom are essential components of such an environment and imperative for all members of the community to incorporate into their scholastic pursuits. The Medical Laboratory Science Program Honor Code does not supersede any institutional policies of the University of Wisconsin Parkside or laws of the State of Wisconsin. All students agree to the terms of the Medical Laboratory Science Program Honor Code by accepting admission to the Medical Laboratory Science Program and recognize these essentials as core competencies of the profession.

The Medical Laboratory Science Program recognizes several core tenets valued by the community. All faculty and students in the Medical Laboratory Science Program agree to:

#### ☐ Respect

- o Recognize and value the talents and roles of each individual.
- o Respect any and all diversity (e.g. gender, race, religion, sexual orientation, economic status,
- culture, identity, background, age, ethnicity, disabilities, family and work situations)
- o Encourage different points of view and the rights of individuals to state them in an atmosphere where dissention is acceptable if delivered in a respectful manner.
- o Treat fellow students, faculty, staff and guests of the Medical Laboratory Science Program with courtesy and respect.
- o Treat clinical faculty, co-workers, patients and families with courtesy and respect.

### $\square$ Integrity

- o Act honestly and ethically both inside and outside of the classroom.
- o Hold true to values that are consistent with the core tenets of the Medical Laboratory Science Program Honor Code and the ASCLS Code of Ethics.

### □ Leadership

- o Demonstrate conviction and commitment to act and to influence positive change.
- o Promote team building, problem solving, and positive conflict resolution.

### ☐ Individual Responsibility

- o Demonstrate readiness and willingness to do what it takes to consistently uphold a high level of professional conduct.
- o Recognize that all individuals are accountable for their actions, inactions, and decisions.

The Honor Code applies to any academic matter pertaining to the Medical Laboratory Science Program. "Academic matter" means any activity which may affect a grade or in any way contribute toward the satisfaction of the requirements for graduation, without reference to the geographical locus of the activity. Academic matter also includes any misrepresentations made with respect to academic achievement by way of transcript, resume or curriculum vitae, or oral statement etc.

# **ASCLS 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 well being 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.

#### APPENDIX A

#### **Essential Functions**

#### ESSENTIAL FUNCTIONS FOR MLS STUDENTS

The essential functions for the Medical Laboratory Science (MLS) program represent the non-academic demands on each student. Essential functions are characteristics and abilities that a student must possess in order to successfully participate in and complete the clinical year. Inability to perform any of these essential functions at an entry level capacity, with or without reasonable accommodations may compromise successful completion of the program. The need for reasonable accommodations will be discussed after acceptance to the program.

The essential functions for students in the MLS program include:

- · Function use of the senses vision, smell, and somatic sensation
  - e.g. The student must be able to accurately observe demonstrations and exercises in which biological fluids and products are being tested for their biochemical, hematological, immunological, microbiological and histochemical components. The student should be able to characterize color, odor, clarity, and viscosity of biologicals, reagents, or chemical reaction products. The student must be able to read and comprehend numbers, text and graphs displayed in print and on a video monitor.
- Effective and efficient communication skills (both oral and written) in English, allowing the student to communicate
  with all members of the healthcare team
  - e.g. The student must be able to communicate orally and in writing. The ability to read and comprehend written material is essential in order to correctly and independently perform laboratory test procedures. The student must be able to instruct patients clearly.
- Psychomotor capability needed to perform all tasks that are normally expected within the scope of practice for a
  medical laboratory scientist in the workplace
  - e.g. The student must be able to collect blood specimens, manipulate instruments that require hand-eye coordination, perform manual laboratory procedures with dexterity, and operate instruments and computers.
     The student must be able to move freely and safely about the laboratory and patient areas.
- · Ability to comprehend, calculate, reason, analyze, synthesize, integrate and apply information
  - e.g. The student should be able to use sufficient judgment to recognize and correct performance and to problem-solve unexpected observations or outcomes of laboratory test procedures.
- · Emotional health allowing for the use of student's intellectual capabilities
  - e.g. The student should be able to exercise sound judgment, promptly complete all responsibilities, be able to work in a changing and stressful environment, display flexibility and function independently in the face of uncertainties or problems that might arise. The student should be able to manage time and prioritize activities in order to complete tasks with realistic constraints. The student must be able to recognize potentially hazardous materials, equipment and situations, and proceed safely in order to minimize risk of injury to patients, staff and self. The student must be able to adapt to working with unpleasant biological specimens.
- · Professional demeanor and behavior
  - e.g. The student us perform his/her responsibilities in a ethical manner in dealing with peers, faculty, staff
    and patients. The student must be honest and compassionate. The student must be able to admit his/her
    mistakes and to ask questions when uncertain. He student must demonstrate the use of tactful, constructive
    criticism
- Ability to meet academic expectations of the program.
  - e.g. The student will be expected to hake written, oral, and computer examinations, complete assignments, prepare and deliver presentations, use a variety of computer applications, and perform required laboratory activities with and without supervision. The student must be able to obtain relevant information from lectures, laboratory activities, clinical assignments and independent student. The student must be able to work independently, in small groups, and as a member of a team of peers.

, ,	tes my acknowledgement that I have read and understand the essential functions ce program at the University of Wisconsin – Parkside.
Applicant's Signature	
Printed Name	Date