

STUDENT _____



Student Orientation Handbook

MEDICAL LABORATORY TECHNICIAN PROGRAM
HENDERSON COMMUNITY COLLEGE

Dear MLT Student,

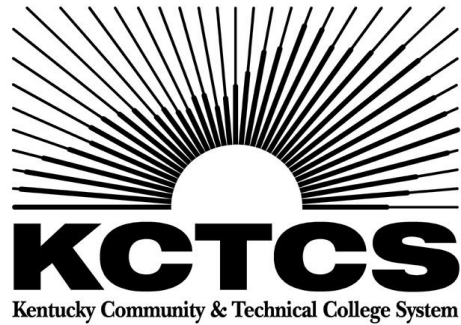
Welcome to the Henderson Community College MLT Program.

Since you probably have questions regarding the MLT program, it is our desire to provide you with answers to many of the questions frequently asked during the first days of school.

Deciding to become a student has been a big decision for you. Much sacrifice and hard work will be required throughout the next two years of study. Successful completion of this program as well as passing the certification examinations will result in a lifetime of varied occupational opportunities.

You are encouraged to fully participate in all aspects of the MLT program at Henderson Community College. It is the desire of this institution and the MLT Program Coordinator that you will successfully complete this program. To this goal we dedicate this handbook.

Amanda Seaton MS, MT(ASCP)^{CM}
MLT Program Coordinator
Henderson Community College



MEDICAL LABORATORY TECHNICIAN

PHILOSOPHY

The philosophy of the Medical Laboratory Technician program embraces the concept that all people have dignity and worth. Each individual should be afforded the opportunity to achieve goals in the vocation of his/her choice. The program is designed to serve the needs of those who wish to enter the field of clinical laboratory science on the technician level. Training is open to all adults 17 years of age or older (including handicapped, disadvantaged, or unemployed) who meet the requirements of the program and those specified by the National Accrediting Agency for Clinical Laboratory Sciences. The code of medical ethics as prescribed by the American Medical Association, American Society of Clinical Pathologists, and American Society of Medical Technologists is adhered to during all phases of instruction.

MISSION STATEMENT

The primary mission of the MLT program is to prepare the student at entry-level competencies for gainful employment as a medical laboratory technician. Integral to this purpose is assisting students in the development of the technical skills and knowledge necessary to perform in the clinical laboratory.

PROGRAM GOALS AND COMPETENCIES

Associate in Applied Science in Medical Laboratory Technician (Program specific)

Upon completion of the Medical Laboratory Technician Program, the graduate should be able to:

1. Perform laboratory tests in all areas of the clinical laboratory.
2. Maintain laboratory materials and equipment.
3. Prevent and detect technical errors.
4. Solve problems as they occur in the clinical laboratory.
5. Carry out an established quality assurance program.

6. Demonstrate professionalism.
7. Follow established clinical laboratory safety guidelines.
8. Demonstrate responsibility for his/her own behavior and dependability towards required duties
9. Follow all institutional policies.
10. Apply the principles of medical ethics.
11. Demonstrate professionalism.
12. Demonstrate a satisfactory working relationship with peers and clinical instructors.
13. Exhibit enthusiasm and initiative towards all subject areas.
14. Recognize his or her own limitations and seek help when necessary.

General Education Competencies (KCTCS):

Students should prepare for twenty-first century challenges by gaining:

- A. Knowledge of human cultures and the physical and natural worlds through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts.
- B. Intellectual and practical skills, including
 - inquiry and analysis
 - critical and creative thinking
 - written and oral communication
 - quantitative literacy
 - information literacy
 - teamwork and problem solving
- C. Personal and social responsibility, including
 - civic knowledge and engagement (local and global)
 - intercultural knowledge and competence
 - ethical reasoning and action
 - foundations and skills for lifelong learning
- D. Integrative and applied learning, including synthesis and advanced accomplishment across general and specialized skills.

PROGRAM DESCRIPTION

The Medical Laboratory Technician (MLT) program provides students with the opportunity to acquire the necessary skills to work under the supervision of a registered clinical scientist or pathologist in a clinical laboratory, hospital, or other health agency.

The MLT student learns to collect specimens from the patient and perform laboratory tests in all areas of the clinical laboratory to include immunohematology, clinical chemistry, hematology, microbiology, serology and urinalysis.

Students enrolled in the MLT program must achieve a minimum grade of “C” in each of the clinical laboratory technician courses to progress in the program.

Upon completion of the program, the graduate is eligible for the national certification examination as a medical laboratory technician.

KCTCS Certificates are available in Physicians Office Laboratory and Phlebotomy.

AAS in Medical Laboratory Technician Curriculum:

Technical Courses:

MLT 101	Introduction to the Clinical Laboratory	3
MLT 112	Urinalysis	2
MLT 115	Serology	2
MLT 205	Clinical Microbiology I	3
MLT 206	Clinical Microbiology II	2
MLT 215	Hematology I	4
MLT 216	Hematology II	3
MLT 227	Immunohematology	4
MLT 233	Clinical Chemistry I	3
MLT 234	Clinical Chemistry II	2
MLT 278	Practicum I	4
MLT 279	Practicum II	4
PHB 151	Phlebotomy for the Health Care Worker	1
PHB 152	Phlebotomy Clinical Experience	<u>1</u>
	Subtotal Technical Hours	38

General Education Courses

BIO 135 OR BIO 137 & 139 BIO 225	Anatomy & Physiology with Laboratory	4
	Medical Microbiology	4
	Computer/Digital Literacy	0-3
ENG 101	Writing I	3
MAT 110	Applied Mathematics, OR a higher math course	3
PSY 110	General Psychology	3
	Humanities/Fine Arts	3
	Oral Communications	3
CHE 130 or CHE 140	Introductory General & Biological Chemistry, OR Introductory General Chemistry*	<u>3-4</u>
	Subtotal General Education	<u>26-30</u>
	Total Hours	64-68

Additional (Transfer/Articulation) General Education Courses

CHE 150 or CHE 180	Introduction to Organic and Biological Chemistry* OR General College Chemistry II*	4(3)
ENG 102	Writing II	3
MAT 150	College Algebra	3
	Subtotal Additional Gen Ed	0-10

KCTCS CERTIFICATES:

Physician's Office Laboratory Certificate*

PHB 151	Phlebotomy for the Health Care Worker	1
PHB 152	Phlebotomy Clinical Experience	1
MLT 101	Introduction to the Clinical Laboratory	3
MLT 112	Urinalysis	2
MLT 115	Serology	<u>2</u>

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Phlebotomy for the Health Care Worker Certificate*:

MLT 101	Introduction to the Clinical Laboratory	AND	3
PHB 151	Phlebotomy for the Health Care Worker	AND	1
PHB 152	Phlebotomy Clinical Experience		<u>1</u>

OR

PHB 170	Applied Phlebotomy	AND	3
PHB 152	Phlebotomy Clinical Experience		<u>1</u>

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**not NAACLS accredited*

(Any MLT course older than 3 years at the beginning of the second year courses must be repeated)

NOTE: All required classes must be completed prior to beginning the 2nd year of the program. See the "Suggested Sequencing of Program Courses." The 2nd year classes must be completed together as a group and cannot be taken part-time.

Suggested Sequencing of program courses

Students are admitted into the MLT Program in the fall of each year. Upon successful completion of the MLT program the graduate is awarded an Associate of Applied Science degree.

First Year Curriculum

First Semester			Total 15 hours
ENG	101	Writing 1	3
BIO	135	Anatomy & Physiology	4
MLT	101	Intro to Clinical Lab	3
PHB	151	Phlebotomy for Health Care Worker	1
PHB	152	Phlebotomy Clinical	1
MAT	110	Math	3

Second Semester			Total 16-17 hours
MLT	112	Urinalysis	2
MLT	115	Serology	2
MLT	206	Clinical Microbiology II	2
BIO	225	Medical Microbiology	4
CHE	130/140	Gen. Chemistry	3-4
CIT	105	Introduction to Computing	3

Summer Session		Total 6 hours
Humanities		3
Communications		3

Second Year Curriculum

First Semester			Total 14 hours
MLT	205	Clinical Microbiology I	3
MLT	215	Hematology I	4
MLT	216	Hematology II	3
MLT	278	Practicum I	4

Second Semester			Total 14 hours
MLT	227	Immunohematology	2
MLT	233	Clinical Chemistry I	3
MLT	234	Clinical Chemistry II	2
MLT	279	Practicum II	4
PSY	110	General Psychology	3

Total 64-68 hours

MLT COURSE DESCRIPTION

PHB 151: Applied Phlebotomy

Description: Covers fundamental techniques in proper venipuncture and capillary collection. Includes a study of medical ethics, laboratory terminology, anatomy and physiology of the circulatory system, communication and record keeping, specimen processing, laboratory safety, isolation procedures and special collection.

PHB 152: Phlebotomy: Clinical Experience

Description: Introduces the student to clinical practice in the phlebotomy department of a laboratory. The student will begin to develop performance skills in routine venipuncture and capillary collection procedures emphasizing performance skills in routine venipuncture and capillary collection procedures.

MLT 101: Introduction to the Clinical Laboratory

Description: Includes an orientation to the laboratory and management structure, professional organizations, professional ethics, communication, and record keeping. Covers medical terminology and abbreviations, quality assurance procedures, laboratory safety rules and procedures, specimen processing, laboratory automation, and basic immunology. Introduces the student to the various laboratory departments.

MLT 112: Urinalysis

Description: Focuses on methodology and clinical significance of urine chemical analysis, interferences with chemical analysis procedures, screening methods used in diagnostic determinations, collection and handling of specimens, and the characteristics and clinical significance of formed elements of the urine. Includes the physiological function of the kidneys and diseases which affect the urinary system.

MLT 115: Serology

Description: Introduces basic immunological principles. Includes applications of serological testing for the diagnosis and monitoring of diseases and other antigenic responses.

MLT 205: Clinical Microbiology I

Description: Introduces the application of microbiological principles to clinical laboratory practice. Includes safety and use of standard precautions, staining, selection and use of media, specimen processing, cultivation and identification of bacteria, and antimicrobial susceptibility testing.

MLT 206: Clinical Microbiology II

Description: Continues with the application of microbiological principles to clinical laboratory practice. Includes mycology, parasitology, virology, and mycobacteriology.

MLT 215: Hematology I

Description: Covers hematopoiesis and classic methodologies of standard hematology procedures. Includes the principles of various automated hematology analyzers, histograms and scattergrams. Provides students with the opportunity to perform basic hematology and coagulation procedures, correlate laboratory data to aid in diagnosis, and describe methodology of procedures and their clinical significance. Includes mechanisms of coagulation, routine coagulation testing, disease states associated with coagulation abnormalities, platelet evaluation, fibrinolysis and anticoagulant therapy.

MLT 216: Hematology II

Description: Continues the study of hematology. Includes a study of anemias, leukemias, lymphomas, miscellaneous abnormal white blood cell disorders to assess hematologic changes and correlate laboratory data to diagnosis. Covers body fluids and other special hematologic procedures.

MLT 227: Immunohematology I

Description: Covers principles and practices in blood banking, including topics such as blood group systems, blood components, antibody identification and compatibility testing.

MLT 233: Clinical Chemistry I

Description: Provides a review of basic inorganic chemistry and organic chemistry principles and types of instrumentation commonly used in a medical laboratory. Covers carbohydrates, non-protein nitrogen compounds, proteins, lipids and enzymes as related to clinical diagnosis. Introduces quality control procedures, including statistical calculations for graph preparation and interpretation of gathered data.

MLT 234: Clinical Chemistry II

Description: Presents the physiology and testing of liver function, hormones, electrolytes and acid-base metabolism. Includes toxicology and therapeutic drug monitoring, tumor markers, and special chemistries.

MLT 278: Practicum I

Description: Develops performance skills and professional attitude in the student in assigned areas of the clinical laboratory. Utilizes and depends upon external institutions to insure adequate clinical education and training. Each clinical laboratory affiliate has designated personnel to assist the student in all assigned areas of the clinical laboratory. Provides a prescribed schedule of rotations in various departments of the laboratory for each individual student by the MLT program director. This practicum is designed to develop skills with strong supervisory instruction in all assigned departments.

MLT 279: Practicum II

Description: Develops career entry level performance skills and professional attitude in the student in assigned areas of the clinical laboratory. Provides opportunities for more responsibility and independence with previously learned procedures. Enhances the student's transition to the world of work by providing work experiences in a clinical setting. Utilizes and depends upon external institutions to insure adequate clinical education and training. (Each clinical laboratory affiliate has designated personnel to assist the student in assigned areas of the clinical laboratory. A prescribed schedule of rotations in various departments of the laboratory is provided for each individual student by the MLT program director.)

MLT COURSE OBJECTIVES

Course objectives are established by the KCTCS Medical Laboratory Technician Curriculum Review Committee and can be found in the course syllabus for each required course.

ADMISSION REQUIREMENTS AND GUIDELINES

Admission to the MLT program at HCC is based on open enrollment for the first year classes. This allows a student to pursue a phlebotomy certificate and Physician Office Laboratory certificate prior to entry into the program for the second year courses. Admission criteria for the first year classes are based on the following college requirements. Detailed general admission guidelines are available in the online KCTCS catalog and on the HCC website at <http://henderson.kctcs.edu/Admissions>.

- ◆ Submit a completed application to the college.
- ◆ Submit high school or GED transcripts.
- ◆ Submit ACT or equivalent scores.
- ◆ Submit transcripts of all post-secondary education.
- ◆ Schedule an appointment with advisor.

Proof of immunizations, background check and drug screen is required.

For students performing any clinical experience class such as PHB 152, MLT 278, and MLT 279, students must meet all requirements set in Castle Branch Compliance Tracker. The cost of Cast Branch Compliance Tracker is \$86.20. Requirements include:

- ◆ Health exam to include verification of MMR, Tuberculin skin test, up to date tetanus, drug screen, proof of chicken pox or varicella vaccination or signed waiver of declination. (Instructor will review the required paperwork with students in PHB 152 and PHB 170)
- ◆ Color-blindness test done on campus.
- ◆ Hepatitis B vaccinations or signed waiver of declination.
- ◆ Criminal background check.
- ◆ Proof of Professional Liability Insurance

Professional Liability Insurance is required. This must be purchased through KCTCS. The cost per semester is added as a course fee for specific MLT classes. Cost may vary from year to year, and generally is between \$11.00 - \$20.00.

A positive drug screen will require a letter from the student's physician on letterhead documenting the required use of the drug. Any other positive result is unacceptable for admission.

A felony class conviction on the student's background check is unacceptable for admission.

Admission to the MLT program occurs when the student begins second year classes. Requirements include all of those listed above plus:

- ◆ An earned grade of "C" or above in all MLT and PHB classes
- ◆ Attendance at a MLT Program Information Conference
- ◆ Signed acceptance of MLT Program Admission Conference Form
- ◆ Any required updates to the clinical experience forms

Note: Students of the MLT program must complete the second year of the program as a block in 2 semesters and cannot take these classes on a part-time basis. In addition, any MLT class taken longer than 3 years prior to a projected graduation date from this program must be repeated. This is to enhance student preparation and performance on the national MLT (ASCP) examination required for MLT certification.

Note: Should greater than 16 students seek admission to the second year of the program, selection will be based on a point system dependent upon the KCTCS Rules of the Senate, which will be distributed by the program coordinator to all students seeking enrollment at that time.

TUITION, FEES, AND REFUND POLICIES

The current tuition rate for HCC can be found in the college's schedule published online at <http://henderson.kctcs.edu/en/Costs and Financial Aid/Tuition and Fees.aspx>. The fee for required student liability insurance is built into costs for the semester and will appear on the student bill. This is generally between \$11.00 and \$20.00.

Additional costs are required for the Healthcare records requirements. These costs are dependent upon the previous immunization record of the student and can vary greatly. There are costs for the drug screen and background check.

The refund policy is based on college guidelines and is found in the schedule published online.

Students can go to the Admissions or Business offices on campus with any questions or concerns regarding tuition, fees and the refund policy.

PROGRAM RETENTION

To progress in the program, a student must successfully pass each course with a “C” or better grade, thereby demonstrating proficiency.

Readmission to the MLT program is dependent upon the following KCTCS guidelines:

- ◆ Readmission to the Medical Laboratory Technician program will be dependent upon available resources.
- ◆ In order for a student to be considered for readmission to the MLT program the applicant must:
 - a. submit a written request to the Program Coordinator at least one week prior to registration for the semester the student is requesting readmission;
and
 - b. meet current guidelines for admission.
- ◆ A student may be re-admitted to the Medical Laboratory Technician program no more than two times.

REQUIREMENTS FOR GRADUATION

The student will have completed the program when they have:

1. Maintained a 70% (C) average in each required MLT and PHB course.
2. Full-filled all college requirements for graduation.

Upon completion of requirements for graduation, the student will receive an Associate of Applied Science in Medical Laboratory Technician.

It is not a requirement that a student pass any type of external certification test to graduate from the HCC MLT program.

SPECIAL LICENSURE OR CERTIFICATION

Upon successful completion of the program, the student can take the national board exam offered by the Board of Certification of the American Society of Clinical Pathologists.

If successful, graduates may then use the “MLT (ASCP)” designation.

METHODS OF INSTRUCTION

The methods of instruction are varied throughout the year. Lecture is the major form of instruction for presentation of theory material. Other methods used to supplement the lecture include films, filmstrips, slides, transparencies, videotapes, and educational internet websites. In addition to lecture and visual presentations, skills are demonstrated and return demonstrations may be required. As students proceed through the 30 week clinical experience, they perform routine laboratory procedures under direct supervision of a voluntary clinical instructor. The MLT program coordinator is responsible for all clinical experiences.

LABORATORY SAFETY

The students receive approximately 10 hours of concentrated instruction on laboratory safety including proper handling of chemicals, types of fires and proper fire extinguisher use, biological hazards, basic first aid, and numerous other topics relating to safety. Additional instruction is received during clinical experiences in the specific laboratory section.

JOB OPPORTUNITIES

Job opportunities are available but the graduate must be mobile and willing to relocate. Most MLT's are employed in city or county hospitals or medical centers, but other positions may include doctor's offices, industry, medical sales, and veterinary clinics.

Advancements are limited for MLT graduates without further education and training. Ambitious individuals can use work experience and/or college courses to satisfy requirements for higher level certification. Higher level certification can lead to advancement in the laboratory.

ADVISORY COMMITTEE

The Medical Laboratory Technician program has an active advisory committee providing guidance in curriculum and skill needs. The committee meets formally in the spring and fall. Many informal meetings are held as need arises. A student will serve as a representative of the class for each advisory committee meeting.

RECRUITMENT

Henderson Community College actively participates in job fairs, college fairs, and health fairs in the surrounding area to inform the public of the various programs offered by our institution. In addition, the Program Coordinator participates in various demonstrations to area high school biology and health services classes.

GRADING SCALE – PROGRAM PROGRESSION

1. The grading system is as follows:

90-100	= A (Superior)
80-89	= B (Above Average)
70-79	= C (Average)
0-69	= D (Unsatisfactory)
2. A semester grade of "C" or better in each MLT course shall be a prerequisite for program progression.
3. If a student is having academic problems (failing tests, etc), it is the responsibility of the student to contact the instructor and seek assistance.
4. It is also the responsibility of the student to contact the MLT instructor concerning make-up work and missed tests the day he/she returns to school following an absence. Failure to contact the instructor will result in a "zero" being given for the missed assignment or test. Tests are to be taken the day the student returns to class.
5. Official grade reports will be provided at the end of each semester.

STUDENT ORGANIZATIONS

Students are encouraged to participate in various on-campus organizations.

Students may be invited to join Phi Theta Kappa, a national honor society for community colleges. This invitation is based largely on scholastic standing.

ATTENDANCE

It is the philosophy of the schools to plan a curriculum for the average student to successfully accomplish the MLT course work in 24 months therefore excessive absences will be detrimental to the student's ability to meet the requirements in both theory and clinical courses. It is also the purpose of the faculty to aid the student in maintaining or establishing habits which are acceptable to future employers.

1. It is the responsibility of each student to report to the classroom by the designated time.
2. Once clinical rotations begin, it will be the responsibility of the student to report to their designated clinical rotation on time.
3. All appointments, including Doctor and Dentist should be made at times other than school hours.
4. Tardiness and Absences should be avoided. When it is unavoidable the student should notify their instructor before class time on that particular day. During clinical rotations absenteeism should be reported to your clinical instructor, as well as the program director.

5. All on-campus and clinical lab time must be made up. The student will work with the instructor/clinical coordinator to schedule makeup time. If the student does not make up the time, he/she will receive an "I" until the time is made up for this class.
6. Following an absence, it is the responsibility of the student to contact the instructor concerning make-up work and missed tests the day he/she returns to school. Failure to contact the instructor will result in a "zero" being given for the missed assignment or test.
7. The instructor shall report to the school registrar and academic dean or designee the name of any student not making satisfactory progress in class due to irregular attendance. The student may be dropped from the course if a reasonable time of counseling support has been given and he/she continues to fail to make satisfactory progress.

ON CAMPUS LAB REQUIREMENTS

All students must wear long pants or skirt with hose/stockings (no bare legs), closed-toe shoes with socks and impervious lab coats that meet the following specifications:

- ◆ impervious to fluids
- ◆ knee length
- ◆ button from bottom to top (at the neck)
- ◆ long sleeves with closed cuffs at the wrists
- ◆ pockets available
- ◆ able to be disposed of when the student exits the program
- ◆ should never leave the MLT on-campus lab
- ◆ appropriate size to fit so that all buttons are buttoned

The student is responsible for their own disposable gloves and safety eye ware.

Gloves must be placed in the biohazard containers, not the regular trash cans or sharps containers.

All sharps of any kind must be placed only in the sharps containers.

Any hair that can dangle in the student's face must be held back with a headband and/or a ponytail holder.

NO FOOD or DRINK in the Lab.

All purses, jackets, book bags, etc. must be safely stored in lockers, away from the lab counter tops and off the floor during labs.

Any student leaving the lab must remove gloves and lab coat, then wash their hands prior to leaving the lab.

DRESS CODE

Personnel in the health care field must present to the general public, as well as to patients, a manner and appearance which will instill security and confidence. Patients have a variety of opinions, beliefs and convictions. Personal appearance, beyond reasonable expectations, may alarm patients and visitors and interfere or even prevent the acceptance of needed medical services.

Professional standards of appearance are important to the overall quality of patient care. For example, a high level of personal cleanliness is maintained as a standard for hospital employment. Poor oral hygiene, offensive body odors, unkempt hair and other signs of poor personal hygiene cannot be tolerated.

The following standards are therefore established for all HCC Medical Laboratory Technician Students.

The student ID Badge **must be worn** at all times above the waist and easily seen while on duty.

DRESS ATTIRE:

A FLUID RESISTANT LAB COAT MUST BE WORN AT ALL TIMES WHILE WORKING IN THE LAB OR OUT OF THE LAB FOR PHLEBOTOMY PROCEDURES.

1. Scrub Suit:
 - a. Hunter green top and bottoms must match.
 - b. T-shirts worn under scrub tops must not be visible past the scrub sleeve or hem of the shirt or scrub top.
 - c. White turtlenecks, knit shirts, and dickeys are permissible with hunter green pants or skirts.
 - d. **No hospital scrubs allowed – unless body fluid contamination.**
2. Underclothing:
 - a. No bare legs.
 - b. Hose or socks required
 - i. Colored socks should be solid color, no loud colors, stripes, or designs.
 - ii. SOCKS should match the pants or be white.
 - iii. HOSE should not be textured or patterned.
 - iv. HOSE and STOCKINGS should be clean and in good condition.
3. Other Underclothing:
 - a. Full undergarments are to be worn, i.e., bra, panties.
 - b. **NO PRINTS, COLORS OR THONGS should show through clothing.**
 - c. Camisole to be worn if appropriate.

4. Shoes:
 - a. Leather shoes only (white, navy, brown or black.)
 - b. **MUST BE CLEAN.**
 - c. No holes.
 - d. Clogs may be worn (No open toe shoes).

5. Personal Appearance:
 - a. Hair should be kept clean, well groomed, and styled.
 - b. Hair color should be conservative – **NATURAL COLORS ONLY.**
 - c. Wigs and hairpieces, including short falls are permissible if they meet the above standards.
 - d. Mustaches and beards are permissible if short, clean and well groomed.
 - e. **No visible nose, tongue, eyebrow, lip, or chin rings are allowed.**
 - f. Patient care providers should ensure hair is secured away from their face at all times to reduce contact with patients.

6. Fingernails:
 - a. Length should be fairly short so as not to hinder laboratory testing and/or ability to perform venipunctures and arterials.
 - b. **Must be clean.**
 - c. Polish may be worn; white or pale tones are suggested. **NO BRIGHT COLORS SUCH AS BRIGHT RED OR HOT PINK – NO CHIPPED POLISH.**
 - d. **NO ARTIFICIAL NAILS**

7. Cosmetics:

All cosmetics may be used in moderation and in good taste.

 - a. **HEAVY MAKE-UP IS NOT ACCEPTABLE.**
 - b. **STRONG, HEAVY PERFUMES ARE NOT TO BE USED.**
 - c. **TATTOOS MUST NOT BE VISIBLE.**
 - d. Facial jewelry, such as eyebrow rings/studs, nose ring/studs, lip rings/studs, or tongue studs are not considered appropriate in the professional hospital environment.
 - e. Individuals may wear no more than a total of **four** earrings in the ear lobes.
 - f. Small posts or hoops no larger than a dime may be worn.

8. Cleanliness:

It is very important to pay particular attention to daily personal cleanliness when working in close proximity with patients, visitors, and other personnel.

 - a. **DAILY USE OF DEODORANT AND FRESH BREATH IS A MUST.**

NOTE:

Students who report to clinicals without meeting the dress code requirements may be asked to leave until the specific dress code violation has been corrected. Each incident will be documented in the evaluations.

Students are subject to any special requirements of the individual clinical facility.

CLASSROOM BEHAVIOR

1. Classes are conducted on an informal basis. Students are expected to participate. A student will not be allowed to control discussion and is expected to accept responsibility to make appropriate, meaningful contributions to class discussions. Students should observe their schedule and read appropriate text material before class.
2. The student is expected to be alert and attentive in class. The instructor is privileged to ask a student to leave class if the individual is inattentive or disruptive. The student will be recorded as absent and the time is subject to make-up at the discretion of the instructor.
3. No EATING or DRINKING is permitted in the classroom lab or clinical areas.
4. SMOKING is not permitted in the classroom or clinical areas. Designated areas have been assigned at the school for smoking.

CONDUCT/STUDENT APPEALS

The student code of conduct and the appeals process for grades are made available in the *KCTCS Code of Student Conduct: Rules, Procedures, Responsibilities*. Students can locate this document at the HCC website: <http://Henderson.kctcs.edu> and click on Student Life > Code of Conduct. This information is found in the Student Handbook, which is distributed to new students during Orientation and can be found on the HCC website: http://henderson.kctcs.edu/Current_Students.

STUDENT COMPLAINTS

A student having a complaint related to the Phlebotomy and/or MLT program may bring that complaint in writing to the attention of the instructor. The instructor will try to assist the student in the resolution of the problem.

If the instructor cannot find a resolution acceptable to the parties involved, the student may bring that complaint in writing to the attention of the MLT program coordinator. The coordinator will try to assist the student in a resolution of the problem.

If the coordinator cannot find a resolution acceptable to the parties involved, the student will need to submit a formal complaint to the division chairperson who will assist the student with the proper process to take.

Written records shall be maintained for 2 years or until the student graduates.

TERMINATION

The following actions will result in termination from the program:

1. Misuse or destruction of school or hospital property.
2. Two consecutive or concurrent probations (academic, attendance, disciplinary).
3. Excessive unexcused absence or tardiness.
4. Cheating, lying or theft.
5. Unprofessional conduct, especially breach of patient CONFIDENTIALITY.
6. Malpractice or unsafe practice.
7. Objectionable behavior when on campus or at the clinical site.
8. Non-payment of monies owed to the college.
9. Use of dangerous drugs or alcohol when on campus or at the clinical site.

PARKING

Parking is provided at the school. Please use any available parking space except those designated as Handicap, Staff or Visitor. You will receive a warning for parking in an unauthorized space. Repetition of unauthorized parking will result in your car being towed at your expense.

GENERAL POLICIES

1. Students are to remain in the area of the hospital or clinic to which they are assigned. Travel is to be limited to the cafeteria, snack bar, gift shop, etc. unless it is to obtain patient specimens. Indiscriminate wandering through or the exploring of the hospital is not permitted.
2. Students wishing to visit a patient in the hospital must do so during breaks or lunch.
3. Telephones provided in the clinical affiliates are for official use. Personal calls are to be limited and brief in time. Excessive use for personal calls will result in the discontinuance of telephone use by students.
4. Non-emergency calls to the student during clinical phase or pre-clinical phase are discouraged.
5. The Clinical Affiliates in cooperation with the MLT program directors will assign experiences for the educational benefit of the student, and students will not be assigned in such a manner that permits replacement of a regular employee.
6. The maximum time (classroom and clinical) scheduled for an individual student will not exceed eight (8) hours per day excluding time for meals.
7. Cell phones are to be turned off during clinical experience time.

COOPERATIVE EDUCATION

The excellence of the MLT program stems from the efforts and abilities of our administration, faculty, advisory committee and clinical sites. This cooperation enhances the learning experience of the students and thus their quality of skills and knowledge.

MLT program students will be placed in clinical rotations through each department of the clinical lab. These clinical rotations involve work experiences designed to help the student develop skills needed for future employment. The Program Coordinator with the cooperation from supervisors in the various departments of the lab evaluates the progress of the students. The expertise of the various supervisors enhances the learning experience of the students and thus their quality of skills and knowledge in each area of the laboratory.

CLINICAL EVALUATION

The student is evaluated at the completion of each clinical rotation by the appropriate clinical supervisor. A student is evaluated on performance skills, professional attitude, psychomotor and affective skills. Each evaluation includes a task list of skills expected for the specific clinical rotation. Periodic conferences are scheduled between the student and the Program Coordinator during the year to discuss evaluations, progress and problems. All evaluations and grades are kept as a part of the permanent record. A copy of the student clinical evaluation, as well as, the clinical task list of required skills are included in the second year handbook.

CONTINGENCY PLAN

The MLT program at HCC admits 14-16 students a year and has affiliate agreements with clinical affiliates to accommodate that number of students. In the event that one of the clinical affiliates should terminate an agreement and another affiliate cannot be found to replace the affiliate, the MLT students in the program will complete their rotations in the following manner:

1. The students will be taken in order according to the highest average in all MLT courses completed at the time, and the highest cumulative GPA for all courses.
2. In the event that all students cannot be accommodated in the other facilities before the semester is over, the students will be given the opportunity to ask for an incomplete or "I" grade. The incomplete grade will be given by the MLT instructor(s) until the rotation(s) can be completed during an appropriate time, as in the summer session.

HEALTH INSURANCE/ON CAMPUS EMERGENCY CARE/CHANGE IN HEALTH STATUS

HEALTH INSURANCE/ON-CAMPUS EMERGENCY CARE:

In case of an in lab/class accident on campus that requires immediate attention, the student will be taken to the nearest immediate care facility or 911 will be called to provide emergency care. The student will be responsible for all costs involved.

PREGNANCY AND CHANGE IN HEALTH STATUS:

Students who are pregnant must submit written permission from a physician to participate in externship hours. After surgery and/or hospitalization, a physician's release to return to clinicals is required. The purpose of the statement is not to exclude the student from the program, but rather to safeguard the student and the student's clients. If any of the immunizations or PPD test are contraindicated due to pregnancy or other conditions, a physician's statement should be submitted.

PERSONAL INJURY:

Students who become injured and/or exposed to bloodborne pathogens at the college or at the clinical site must complete an accident form at the facility and the College accident form (FM 84) immediately. The coordinator will assist the student in completing the form FM 84. Additional laboratory tests may be required and obtained at the Henderson County Health Department or elsewhere at the student's expense.

DISPOSABLE NEEDLE POLICY:

Due to the risk factor involved in transmission of bloodborne pathogens and the liability related to injury from discarded sharps, the following policy will be adopted until further notice. Do not take syringes or needles out of the classroom. Place used needles, syringes, and other sharps in a sharps red plastic container marked biohazardous materials. Anyone injured by a needle must report the accident and complete an accident report. Routine puncture wound care will be initiated. This may include application of an antiseptic agent and Band-Aid, tetanus injection from your family physician, and follow up lab work. This will be at the student's expense. This is for your own protection.

ACKNOWLEDGMENT

The MLT Handbook is written by the Program Coordinator in compliance with the Henderson Community College Policies and Procedure, the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), the Clinical Affiliates Policies and Procedures, input from the MLT Advisory Committee and Clinical Instructors.

MLT PROFESSIONAL ENTRY LEVEL COMPETENCIES

Upon completion of the Medical Laboratory technician Program, the graduate should be competent in:

1. Collecting, processing and analyzing biological specimens and other substances.
2. Performing analytical test of body fluids, cells and other substances.
3. Recognizing factors that affect procedures and results and taking appropriate actions within predetermined limits when corrections are indicated.
4. Perform and monitoring quality control within predetermined limits.
5. Performing preventative and corrective maintenance of equipment and instruments or referring to appropriate sources for repairs.
6. Applying principles of safety.
7. Demonstrating professional conduct and interpersonal communication skills with patients, laboratory personnel, and other health care professionals and with the public.
8. Recognizing the responsibilities of other laboratory and health care personnel and interacting with them with respect for their jobs and patient care.
9. Applying basic scientific principles in learning new techniques and procedures.
10. Relating laboratory findings to common disease processes.
11. Establishing and maintaining continuing education as a function of growth and maintenance for professional competence.

Technical Standards (Essentials)

The Medical Laboratory technician specializes in the application of scientific knowledge and theory in the skillful performance of medical/clinical laboratory functions. Therefore, to be considered for admission or to be retained in the program after admission, all applicants should possess:

1. Sufficient visual acuity and color perception to perform microscopic examinations, to distinguish color reactions, and to detect antigen-antibody reaction.
2. Sufficient gross and fine motor coordination to efficiently implement the skills required in performing laboratory functions.
3. Sufficient communication skills (verbal, non-verbal, and written) to interact effectively with individuals.
4. Sufficient intellectual and emotional functions to plan and implement laboratory duties in a responsible manner.

MEDICAL LABORATORY TECHNICIANS AT CAREER ENTRY

According to the American Society for Clinical Pathology, an entry level MLT is defined as:

TECHNICIAN LEVEL

Knowledge

The technician has a working comprehension of the technical and procedural aspects of laboratory tests. The technician maintains an awareness and complies with regulatory requirements, safety regulations and ethical standards of practice. The technician correlates laboratory tests to disease processes and understands basic physiology recognizing appropriate test selection and abnormal test results.

Technical Skills

- *Follows established procedures for collecting and processing biological specimens for analysis.*
- *Performs chemical, microbiologic, immunologic, hematologic and immuno-hematologic laboratory procedures that require limited independent judgement.*

The technician comprehends and follows procedural guidelines to perform laboratory tests to include (1) specimen collection and processing; (2) instrument operation and troubleshooting; (3) result reporting and record documentation; (4) quality control monitoring; (5) computer applications and (6) safety requirements.

Problem Solving and Decision Making

- *Recognizes unexpected results and instrument malfunction and takes appropriate action.*

The technician recognizes the existence of procedural and technical problems and takes corrective action according to predetermined criteria or refers the problem to the appropriate supervisor. The technician prioritizes test requests to maintain standard patient care and maximal efficiency.

Communication

- *Provides laboratory information to authorized sources.*

The technician communicates specimen requirements, reference ranges, and test results, and prepares drafts of procedures for laboratory tests according to a standard format.

Teaching and Training Responsibilities

- *Demonstrates laboratory technical skills to other laboratory personnel*

The technician trains new technicians and students and maintains technical competence.

The Associate in Applied Sciences at Henderson Community College's MLT Program is accredited by:

National Accrediting Agency for Clinical Laboratory Sciences
5600 N. River Rd., Suite 720
Rosemont, IL 60018
Phone: 773-714-8880
FAX: 773-714-8886
Web Page: <http://www.naacls.org>
Email: info@naacls.org

The certificates are KCTCS certificates and are not accredited by NAACLS.

HENDERSON COMMUNITY COLLEGE
ACADEMIC PLAN/APPLICATION FOR ASSOCIATE IN APPLIED SCIENCE DEGREE IN MEDICAL LABORATORY TECHNICIAN

EMPL ID _____ Major/Program Code _____ Name _____

(Complete shaded areas as applicable)

2014

Academic Success Requirements (May be required)	Semester Taken	Credit Hours
ENC 090 - Foundations of College Writing I		3*
ENC 091 - Foundations of College Writing II		3*
MAT 055 - Pre-Algebra		3*
MAT 065 - Basic Algebra with Measurement		3*
MAT 085 - Intermediate Algebra		3*
RDG 020 - Improved College Reading		3*
RDG 030 - Reading for the College Classroom		3*
* Courses numbered 001-099 and MA 108 do not count toward the determination of grade point average or as credit toward graduation.		

General Education Requirements	Semester Taken	Credit Hours
ENG 101 - Writing I		3
PY 110 - General Psychology		3
COM 181 - Basic Public Speaking OR		
COM 252 - Introduction to Interpersonal Communication		3
Heritage/Humanities Course		
		3
Mathematics Course (<i>Mathematics course must be MAT 110 or a higher level general education math course.</i>)		
		3
Chemistry Course (<i>Chemistry course must be CHE 130 or a higher level general education chemistry course.</i>)		
		3-4
Subtotal General Education Requirements		18-19

Medical Laboratory Technician Requirements	Semester Taken	Credit Hours
Digital Literacy Course		
		0-3
BIO 135 - Basic Anatomy & Physiology with Lab		4
MLT 101 - Introduction to the Clinical Laboratory		3
PHB 151 - Phlebotomy		1
PHB 152 - Phlebotomy Clinicals		1
MLT 112 - Urinalysis		2
MLT 115 - Serology		2
BIO 225 - Medical Microbiology		4
MLT 205 - Clinical Microbiology I		3
MLT 206 - Clinical Microbiology II		2
MLT 215 - Hematology I		4
MLT 216 - Hematology II		3
MLT 225 - Immunohematology I		2
MLT 226 - Immunohematology II		2
MLT 233 - Clinical Chemistry I		3
MLT 234 - Clinical Chemistry II		2
MLT 278 - Practicum I		4
MLT 279 - Practicum II		4
Subtotal Medical Laboratory Technician Requirements		46-49
Total Credit Hours		64-68*
*A course used to fulfill one requirement cannot be used to fulfill another requirement.		

Computer/Digital Literacy	Semester Demonstrated	
Computer/digital literacy has been demonstrated by:		/

The Associate in Applied Science Degree in Medical Laboratory Technician is awarded to students who complete a minimum of 64 credit hours, including the specified requirements, with a cumulative grade point average of 2.0 or higher.

Technical Standards Acknowledgement Form

I have read and understand the Technical Standards below and have had the opportunity to discuss these with the MLT Program Coordinator.

Student's Printed Name:	
Student Signature:	
Date:	

Technical Standards (Essentials)

The medical/clinical laboratory technician specializes in the application of scientific knowledge and theory in the skillful performance of medical laboratory functions. Therefore, to be considered for admission or to be retained in the program after admission, all applicants should possess:

1. Sufficient visual acuity and color perception to perform microscopic examinations, to distinguish color reactions, and to detect antigen-antibody reaction.
2. Sufficient gross and fine motor coordination to efficiently implement the skills required in performing laboratory functions.
3. Sufficient communication skills (verbal, non-verbal, and written) to interact effectively with individuals.
4. Sufficient intellectual and emotional functions to plan and implement laboratory duties in a responsible manner.

**MEDICAL LABORATORY TECHNICIAN PROGRAM
HENDERSON COMMUNITY COLLEGE
ADVISORY CONFERENCE**

The following items have been reviewed with _____ in the Advisory Conference:

- Student Orientation Handbook
- Program Objectives
- Admission Requirements & Technical Standards
- Admission Process
- Entry Level Competencies
- Curriculum
- Criteria for Successful Completion of the Program
- Safety and Universal Precautions
- Clinical Assignments

Costs:

- Castle Branch Compliance Tracker
- Liability Insurance
- Books
- Uniforms
- Transportation
- Health Insurance
- Financial Aid/Scholarships
- Certification/Licensure
- Health Related Vaccines, Background Check and Drug Screen
- Career Opportunities
- Work Conditions
- Salaries
- Higher Education Opportunities – Importance of Continuing Education

Applicant: _____

Advisor: _____

Date: _____

This acknowledges receipt of the Pre-MLT Handbook

Name _____

Signature _____

Date _____