TABLE OF CONTENTS

Welcome Information	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	2
MLT Personnel			2
Accreditation Information		• • • • • • • • • • • • • • • • • • • •	3
Vision, Mission and Goals Statements	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	4
Program History	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	4
Description, Essential Skills and Com	petencies		5-7
Expectations/Responsibilities			8-10
Classroom Behavior Contract	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	11-13
Curricular Structure	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	14-15
Cooperative Laboratories			15
Updating Course work			16
Advance Standing Consideration		•••••	16
AAS Curriculum Guide/Course descr	iptions		17-20
Grading Policies	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	20
Clinical Practica Policies			21-24
Dept. Policies and Procedures	Discipline Advisement Student Files		24-29
Admission into Program	•••••	•••••	29-30
Appendix			31

Welcome!!!

The faculty and staff of Barton's Medical Laboratory Technician (MLT) program are pleased to welcome you to the College and wish you every success as you pursue your education. This program of study will provide you with a variety of learning experiences to prepare you to play a major role in the detection, diagnosis and treatment of disease. It is important for you to realize that employers require graduates, who are not just technically competent, but excellent communicators, critical thinkers and problem solvers. Did you know that more than 75% of health care practitioners' treatment decisions are based on what the lab reports? For those individuals that enjoy science and technology, producing useful information from blood, body fluids and tissues, this career is for you.

http://www.ascp.org/Laboratory-Professionals

It is Barton's goal to assist you in developing your optimum level of performance and gain entry-level competency. As a graduate of the MLT Program, you will be prepared to work within the health care team and provide quality health care. *

This handbook will provide you with MLT program information that is *supplemental* to the Barton Student Handbook. The College student handbook is located on the Barton website, in the "Current Student" tab

The MLT program handbook does not replace current Barton publications which include college policies and procedures and Barton Student Handbook. It is not a contract and it is subject to review and change.

If I or the faculty and staff can be of assistance, please get in touch with us.

Sincerely,

Cheryl Lippert, MLT Program Director/Instructor/advisor Office S-129 (Science Building) 620-792-9266 or 888-423-1711

Program Personnel

Dana Weber MLT Instructor/advisor

Office S-134 (Science Building) 620-786-1113 or 888-423-1711

Andrea Thompson **Associate Faculty** Georgiana Yasko **Associate Faculty** Grace Leu-Burke **Associate Faculty**

Secretary

620-792-9266 or 888-423-1711 Office S-127 (Science Building) FAX 620-786-1164

*You will be eligible to take a national certification exam and be prepared to work in the Medical Laboratory Field.

Administration:

Dr. Kathy Kottas, Executive Director of Nursing & Healthcare Education Elaine Simmons, Dean of Workforce Training and Community Education

Dr. Robin Garrett, College Vice-President

Dr. Carl Heilman, College President

ACCREDITATION INFORMATION

Barton Community College (BCC) is accredited by the Higher Learning Commission and is a member of the North Central Association of Colleges. Barton is also accredited by the Kansas Board of Regents.

The Higher Learning Commission

30 North LaSalle St., Suite 2400 Chicago, IL 60602 800 621 7440 www.ncahigherlearningcommission.org

Kansa Board of Regents

700 SW Harrison, Suite 1410 Topeka, KS 66603-3760 www.kansasregents.com

The Medical Laboratory Technician program at Barton Community College is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Nation Accrediting Agency for Clinical Laboratory Sciences

5600 N. River Road, Suite 720 Rosemont, IL 60018-5119 847 939 3597 www.naacls.org

Mission and Goals

Barton Community College Medical Laboratory Technician Program's mission, in support of the greater vision of the college is to provide medical laboratory training at the Associate Science Degree level to help meet the staffing needs of laboratories.

Barton's MLT Program Advisory Committee has established the following goals and benchmarks for the Program:

- 1. To produce graduates eligible to take and pass a nationally recognized certification examination at the MLT level.
 - o Benchmark: 85% or more of Barton's MLT program graduates will pass the MLT certification exam on their first attempt.
- 2. To prepare students for entry-level positions as Medical lab Technicians in a variety of health care settings.
 - O Benchmark: 95% or more of Barton's MLT program graduates will secure employment as MLTs or continue their education in a related field.
- 3. To provide each student with the knowledge and skills necessary to complete the AAS degree MLT program.
 - O Benchmark: 60% or more of Barton's MLT program students will complete the AAS degree program.

Program History

The Medical Laboratory Technician (MLT) program at Barton Community College was established in 1976 and accepted its first students in the fall of 1977. This program started as a traditional on campus (F2F) face to face program; with students receiving lecture in the classroom and laboratory sessions in the Barton MLT laboratory. In 1999, the first Hybrid MLT classes were offered for distance learning students. The lectures were offered on-line and the laboratory sessions were conducted in a functioning hospital or clinical laboratory setting. Hybrid students were required to meet with Barton's representatives or came to campus periodically. From 2010-2012 Barton moved to offer our distance learning students support from the Barton Campus via electronic connection and direct instructor oversight. We look forward to more innovations and improvements as we move through the next decade. As of 2012, the MLT courses are offered in a more standardized, online format with enriching lab exercises supported by either hospital or clinic labs, or the Great Bend campus lab.

Description of the Profession http://www.naacls.org/docs/Section3 CLT-MLT.pdf

"The clinical laboratory professional is qualified by academic and applied science education to provide service in clinical laboratory science and related areas in rapidly changing and dynamic healthcare delivery systems. They perform, develop, evaluate, correlate and assure accuracy and validity of laboratory information; direct and supervise clinical laboratory resources and operations; and collaborate in the diagnosis and treatment of patients. With diverse and multi-level functions in the areas of analysis and clinical decision-making, information management, regulatory compliance, education, quality assurance and performance improvement the laboratory professional is welcome wherever laboratory testing is researched, developed or performed.

Clinical laboratory professionals possess skills for financial, operations, marketing, and human resource management of the clinical laboratory. We practice independently and collaboratively, being responsible for our own actions, as defined by the profession. We have the requisite knowledge and skills to educate laboratory professionals, other health care professionals, and others in laboratory practice as well as the public."

"The ability to relate to people, a capacity for calm and reasoned judgment and a demonstration of commitment to the patient are essential qualities. Communications skills extend to consultative interactions with members of the healthcare team, external relations, customer service and patient education. Laboratory professionals demonstrate ethical and moral attitudes and principles that are necessary for gaining and maintaining the confidence of patients, professional associates, and the community."

(from the Standards of Accredited Educational Programs for the Clinical Laboratory Technician/Medical Laboratory Technician, NAACLS, 2003)

Competencies of the Medical Laboratory Technician

The MLT Program is based on a philosophy of education described as competency-based education. In this system, competencies, abilities, and skills that you must acquire and demonstrate to become an exemplary technician are stated as behavioral objectives.

"Medical laboratory technicians are competent in:

- o Collecting, processing, and analyzing biological specimens and other substances.
- o Recognizing factors that affect procedures and results, and taking appropriate actions within predetermined limits when corrections are indicated.
- o Performing and monitoring quality control within predetermined limits.
- Performing preventive and corrective maintenance of equipment and instruments or referring to appropriate sources for repairs.
- Applying principles of safety.
- Demonstrating professional conduct and interpersonal communication with patients, laboratory personnel, other health care professionals, and the public.
- o Recognizing the responsibilities of other laboratory and health care personnel and interacting with them with respect for their jobs and patient care.

- Applying basic scientific principles in learning new techniques and procedures.
- o Relating laboratory finding to common disease processes.
- o Establishing and maintaining continuing education as a function of growth and maintenance of professional competence."

(from the Preamble to the Essentials of Accredited Educational Programs for the Clinical Laboratory Technician/Medical Laboratory Technician, NAACLS, 2010)

Essential Requirements

To become a competent Medical Laboratory Technician, you must be able to perform routine medical laboratory procedures, as well as collect the specimens to be analyzed. Development of these competencies requires certain physical capabilities. The following essential functions are the non-academic requirements of the program that you must meet or master to successfully participate in the program and become employable. This list is provided so you will be able to assess your own health and ability to complete the program successfully. You must be able to participate in course work, on and off the College campus, in ways that will not endanger yourself, students, faculty, patients, or others.

- Motor Skills and Physical Requirements:
 - o Effectively read written material, numbers and graphs displayed in print and on a video monitor.
 - o Perform procedures and manipulate equipment that requires eye-hand coordination including but not limited to medical microscope and pipets.
 - Discriminate color reactions and fine microscopic structural differences.
 - O Hear alarms that are used to signal instrument malfunction, fire or other emergencies.
 - O Move freely and safely about a laboratory.
 - o Reach lab counters, shelves, patients lying in beds and patients seated in specimen collection stations.
 - O Tolerate wearing personal protective equipment.
 - O Use an electronic keyboard and counter.
 - O Characterize the color, odor, clarity and viscosity of biologicals, reagents and chemical reactions.
 - o Tolerate lengthy periods of physical activity including standing/sitting.
- Communication Requirements:
 - o Read and comprehend technical and professional materials.
 - o Follow verbal and written instructions in order to correctly and independently perform lab testing.
 - o Clearly instruct patients prior to specimen collections.
 - o Effectively communicate with faculty, students and other health care professionals verbally and electronically.
- **Intellectual Requirements:**
 - O Be able to comprehend, measure, perform mathematical calculations, reason, integrate, analyze, compare, self-express and self- evaluate.

- Be able to exercise sufficient judgment to recognize and correct performance deviations.
- Behavioral Requirements:
 - O Be able to manage the use of time and to prioritize actions to complete tasks within realistic constraints.
 - o Possess the emotional health necessary to effectively employ intellect and exercise appropriate judgment.
 - O Be able to provide professional and technical services while experiencing the stresses of task-related uncertainty (ambiguous test orders, ambivalent test interpretations), emergent demands (STAT test orders) and a distracting environment (noise, crowding, complex visual stimuli).
 - o Be flexible and creative; and adapt to professional and technical change.
 - o Recognize potentially hazardous materials, equipment and situations and proceed safely to minimize risk of injury to patients, self and others.
 - o Adapt to unpleasant biological.
 - O Support and promote the activities of fellow students, health care professions.
 - o Be honest, compassionate, ethical, self-motivating and responsible. Be able to offer constructive comments and accept them.

Upon acceptance into the Barton MLT, you will be asked to sign a statement that you have read the Essential Requirements and that you expect to be able to perform these functions. All reasonable accommodations will be made to help you succeed.

BCC is committed to provide reasonable accommodations for students with special needs. Please refer to the College catalog at the following website for more information on the notice of nondiscrimination. http://www.bartonccc.edu/noticeofnondiscrimination

Disability

The MLT Program supports the philosophy of Barton Community College in recognizing the rights of all persons to gain a post-secondary education. Admission into the Program will not be denied to anyone based solely by reason of disability. Counsel will be provided to any individual identified as having a disability regarding services available and performance criteria of the Program.http://www.bartonccc.edu/supportservices/disabilityservices

One disability has been identified of such nature as to preclude successful completion of the MLT program. In spite of modifications of the training or testing, the seriously visually impaired would not be able to successfully complete the program. This is due to the great number of critical skills that require visualization in order to be accomplished. Even though the training would not be denied to the seriously visually impaired, realistic counseling identifying the requirements for completion of the program would be provided to the student.

EXPECTATIONS AND RESPONSIBILITIES

Teaching and Learning

You may expect the MLT faculty and staff to:

- Be knowledgeable about the subject under study and/or direct students to sources of information.
- Use effective teaching approaches, i.e. holding students to high standards of performance, explaining desired outcomes and applying fair and clear articulated evaluation practices.
- Be available for consultation.

In turn, the MLT faculty and staff expect you to:

- Be prepared for and attend classes and structured learning activities.
- Participate fully in classroom and online activities.
- Invest the time and effort demanded by course requirements.
- Complete assignments in a timely fashion.
- Behave in a civil, supportive manner toward peers and teachers.
- Strive to apply what you learn in class to your life outside the classroom.

Curriculum

You may expect the MLT Program to:

- Offer a curriculum that provides a coherent, intellectual and practical experience.
- Offer learning experiences to develop entry level competencies of the Medical Laboratory Technician.

In turn, the MLT faculty and staff expect you to:

- Be willing to research answers to questions on your own.
- Seek advice from faculty and staff who are knowledgeable about specific content areas.
- Accept the written student outcomes and expected results presented in this handbook.
- Use the course syllabi and objectives.

Professional Conduct

You may expect the MLT faculty and staff to:

- Serve as role models for ethical and moral behavior.
- Communicate clearly and fairly apply rules, policies and practices.
- Provide programs, services and facilities as described in the program publications.

In turn, MLT faculty and staff expect you to:

- Distinguish between actions that are consistent with and those which violate the principles of professional ethics.
- Behave in a manner consistent with the principles of integrity and ethics.

Quality of Institutional Life

You may expect the MLT Program to:

- Have and support diversity within the student body, faculty and staff consistent with the program's context and educational purpose.
- Treat you with civility, respect, fairness and compassion.

- Guarantee and model free expression through logical and rational conversation.
- Provide a safe learning environment free from harassment.

In turn, the MLT faculty and staff expect you to:

- Treat each other, faculty and staff with civility, respect and compassion.
- Acknowledge the interdependence of the MLT Program and the clinical affiliates and cooperating laboratories and the gift you are receiving from them.
- Take responsibility for your learning and collective welfare.
- Contribute to the quality of life in the program and your community.

Professional Behavior

In order to demonstrate acceptable professional behavior, you must regularly exhibit the following in the classroom, in the laboratory and in your work:

- Ethical responsibility by demonstrating accountability and responsibility for laboratory testing, reporting and quality control.
- Performing duties in an honest and conscientious manner.
- Maintaining good attendance and punctuality by:
 - O Notifying the instructors of unexpected absence/tardy.
 - o Requesting advance approval for planned absence/tardy.
 - o Arriving to class and labs punctually.
 - O Notifying the instructors when you are not in an assigned area of the lab.
- Using free time effectively.
- Adapt to a changing environment by:
- Approaching and performing routine tasks confidently.
 - o Establishing priorities among tasks.
 - O Demonstrate ability to transfer skills and knowledge from one lab section to another.
 - O Complying with changes in policies and procedures.
- Maintain professional appearance and personal hygiene.
- Use constructive criticism by:
 - O Responding to suggestions in a positive manner.
 - O Maintaining a sense of cooperation and team work.
- Cooperate with other personnel by:
 - o Following directions of program officials and policies.
 - O Responding to events and situations in a positive manner.
 - o Respecting opinions of others.
 - O Assisting others as time permits.
 - O Keeping work area, supplies, etc. neat, clean and stocked.
- Receive and relate information by:
 - O Asking and answering questions in a courteous manner.
 - o Participating in discussions.
 - o Listening attentively.
 - O Writing legibly, neatly and in an organized manner.
 - o Responding appropriately to verbal and written inquires.
 - o Demonstrating basic computer literacy.

- Demonstrate legal responsibility by:
 - O Respecting confidentiality of lab data and instructional content.
 - O Accurately reporting of quality control data and specimen results.
 - o Following program and laboratory chain of command.
 - o Following established policies and procedures for safe lab practices involving equipment, chemicals and biohazards.
 - O Identify and report potential hazards in the work place.

You will be asked to sign and return the following Classroom Behavior Agreement upon acceptance into the MLT Program. You may be required to sign a copy of the Classroom Behavior Agreement for each of your MLT courses as you take them so your instructor also knows that you understand what is expected of you.

Contract on Classroom/Laboratory Behavior for Medical Laboratory **Technicians**

Most students exhibit appropriate behavior in class, but there is some disagreement what "appropriate" behavior is. At times, a consumer culture creeps into the classroom, with students sometimes perceiving faculty as employees hired to serve them. This is not the appropriate comparison -an instructor is not here to give you what you want, but rather to help you obtain what you need. An instructor is more like a physician. Just as any doctor who tells you "everything is fine" so that you'll be happy (when everything is not fine) should be sued for malpractice, any faculty member who gives you an "A" regardless of your performance or allows anything to happen primarily because that is what will make you happy is doing you and other students a disservice.

Learning is a group activity, and the behavior of each person in class in some way or the other affects the learning outcomes of others. If we keep those thoughts and the following rules in mind, the classroom experience will be a better one for everyone involved.

Rules:

- Class begins promptly at the beginning of the class period. You should be in your seat and ready to start participating in class at that time. That same rule applies to me-I should be ready at the start of the class which means having the technology operational.
 - a. Always bring the required supplies and be ready to be actively engaged in the learning process. This communicates preparedness and interest.
 - b. If you come into class after an assignment has already been returned, please do not ask for your assignment until after the class is over. It is unfair to the other students in class to wait while the instructor searches again for your paper because you weren't there the first time. Just ask for it after class, and I'll be happy to supply it to you.
 - c. If deciding whether to attend class, please do not ask me if we are covering anything important on that day. The course is carefully planned out; every day is important.

(Correlation to the laboratory: you will need to be on time and ready to work.)

2. If you bring a newspaper, magazine or other non-related reading to class, put it away before the start of class. If you sat in a business meeting and read the Wall Street Journal while the boss was outlining a new strategy, you'd likely be fired or demoted. The same standard applies here. In return, I promise to listen when you are talking to me and to treat you with respect. Feet belong on the floor, not the chair in front of you.

(Correlation to the laboratory: reading non-related material lends a nonprofessional appearance, and there are always the policy and procedure manuals to review and continuing education articles to read. There are many microbes on those shoes.)

3. Do not study material from other classes during this class, or complete your homework from this class during lecture/activity time. If you feel that you must spend our class time studying or doing homework, please go

(Correlation to the laboratory: your safety and patient result accuracy demands your full attention)

4. Turn your cell phone off or to vibrate before the start of class. I will do the same. Texting is distracting to me and others. It is like having another conversation going on during the class. So don't text; I will not either.

(Correlation to the laboratory: think about dealing with a patient or colleague and your cell phone rings, you are being paid to pay attention not socialize.)

5. It is fine to bring a drink or food to a lecture room class, as long as it isn't distracting. However, while in the MLT lab (S-116) no food, drink or gum is allowed. Pick up your trash; you wouldn't visit a friend's house and leave newspapers, cans, bottles and wrappers lying around after you left so please don't do it here.

(Correlation to the laboratory: for safety and regulatory reasons, you will not be allowed to eat or drink in any laboratory.)

- 6. I expect to have your attention for the full class period. This means:
 - Avoid conversations with people sitting around you. Even if you whisper, realize that other people can certainly see you, and it is distracting to them and me.
 - b. Do not start zipping up your backpack and rustling papers before the end of class period. If one person does it, it seems to trigger others, and makes the last few minutes less than optimal for everyone.

(Correlation to the laboratory: inattentiveness is always a safety issue.)

- 7. If you know that you'll need to leave before class is over, try to sit as close to the door as possible so as to cause the least amount of disruption. Similarly, if you arrive to class late, just slip in as quietly as possible and take the first available seat you come to.
- 8. If you are so tired that you cannot keep your head up, you should leave. I realize that environmental factors affect this, including warm rooms, dimmed lights and material that may not be interesting to you. However, laying your head on the desk or sleeping in class is rude, and distracting to others. You could miss critical information. I'll try to make class interesting, but my primary goal is to teach you, not to entertain you.

(Correlation to the laboratory: missing critical information and directions along with inattentiveness is a safety issue.)

9. Turn in assignments on time. Earthquake, fire, flood and catastrophic illness are the only reasonable excuses for a late submission. You want me to know who you are for the right reasons.

(Correlation to the laboratory: results and specimen collections MUST be completed in a timely manner or a patient's health can be impacted.)

10. Being courteous in class does not mean that you have to agree with everything that is being said. However, you will rarely get your way with anybody in life by being rude, overly aggressive or just plain hostile. If you disagree with me (or another student) it is a good idea to wait and discuss the situation when we are not upset.

(Correlation to the laboratory: To listen does not mean that you necessarily agree. Common courtesy extends to discussion, listening and accepting correction. Your safety or the patients may depend on it.)

11. The rules of the syllabus, content of the exams, content of lectures and calculation of the grade you earned are not a starting point for negotiations. While I am always willing to work with students on an individual basis, I cannot negotiate individual terms with each student.

12. Your questions are NOT an imposition-they are welcome and one of the professional highlights of my day. Chances are, if you have a question, someone else is thinking the same thing but is too shy to ask it. Please – ask questions! You'll learn more, it makes class more interesting and you are helping others learn as well. Please raise your hand if someone else is speaking. It is rude to interrupt, like jumping ahead of someone in

(Correlation to the laboratory: medicine is an evolving science. Questions are necessary.)

- 13. If emergencies arise that require an absence from a session, be sure to get the notes and all other information that was covered in class from a colleague you trust.
- 14. The time to be concerned about your grade is the first fourteen weeks of the course, not the last week. (Correlation to the laboratory: the time to be concerned about your job performance and your patient's welfare is on a continuous basis; not the day before your performance evaluation.)

Student Signature	Date	Instructor Signature
Student Printed Name		Instructor Printed Name

Thanks to Dr. John Drea at Western Illinois University for use of this form. 06/2011

Curricular Structure and Instruction

The Barton MLT program is a competency based educational system. The competencies,

abilities and skills you must acquire and demonstrate to become an exemplary technician are stated as behavioral objectives.

The curriculum is composed of general education, basic science, mathematics and clinical laboratory science courses. It includes all major subject areas currently applied in the contemporary clinical laboratory. Behavioral objectives which address cognitive, psycho-motor and affective domains are provided for in the didactic and applied (clinical practice) aspects of the program. The course objectives show progression to the level consistent with entry into the profession. The applied courses are taught in the MLT Laboratory (or a cooperating laboratory if you are a distant learning student) and in formally affiliated clinical facilities. These courses are intended to help you develop basic skills, understand principles and master the procedures involved. The MLT degree seeking student must participate in lab time during the course semester.

The curriculum addresses:

Methodologies for all major areas currently applied by a modern clinical laboratory, including problem solving and troubleshooting techniques.

- > Collecting, processing and analyzing biological specimens.
- ➤ Laboratory result use in diagnosis and treatment.
- > Communication skills (English communication skills sufficient to serve the needs of patients and the public).
- Educational methodology (technical training sufficient to orient new employees).
- > Quality assessment in the laboratory.
- > Laboratory safety and regulatory compliance.
- > Ethical and professional conduct.
- > Significance of continued professional development.

The learning experiences are sequenced to develop and support entry level competencies and include instructional materials, presentations, discussions, demonstrations, supervised practice and experience whether as a distance or campus student.

The required course of study is general education and phlebotomy course completion before starting the MLT courses. Phlebotomy and its corresponding 100/120 hour clinical introduces the student to the laboratory and the medical field. The general education courses are the foundation that the MLT courses are built on. Urinalysis/Body Fluids, Hematology/Coagulation, and MLT Immunology are completed before enrollment in the 220 hour Clinical Practicum I. Clinical Microbiology I and II, Clinical Chemistry I and II, and Blood Bank are completed before enrollment in Clinical Practicum II of 400 clinical hours.

^{*}Individual course syllabi include course goals and objectives.

MLT Seminar and MLT Capstone are required to complete the AAS MLT degree. There are variations to this schedule dependent upon current employment, general education course completions and if you are a full-time or part-time student.

Cooperating Laboratories for Distance Learning Students

If you are a student not using the Great Bend campus cooperative laboratory you:

- Should be employed by your cooperating hospital or clinical laboratory facility.
- Must not receive compensation for the time spent in the learning experience.
- Must have a signed Notice of Understanding* between the College and the Cooperating Laboratory on file in the MLT office **prior to the beginning of the** relative semester.
- Must have your own computer and a reliable internet service.
- Nepotism is discouraged and will be discussed on a student by student basis.

The personnel of the Cooperating Laboratory are expected to provide basic bench instruction related to performance of routine laboratory procedures, to evaluate respective laboratory competencies, to serve as proctors for various examinations, and to give other valuable assistance as needed. The online option is based on the premise that the experiences in the Cooperating Laboratory can "mirror" the basic training received by MLT students in Barton's Great Bend campus cooperative MLT laboratory.

It is permissible that the cooperating laboratory be the laboratory in which you are currently employed. When that occurs, the expectation is that you will not receive compensation for the time spent in the learning experience.

Clinical Affiliates of the BCC MLT Program

A large number of medical laboratories have partnered with Barton's MLT Program to provide clinical internships. For a current listing of our clinical partners see list in appendix.

Updating Coursework

Any required science courses (Anatomy & Physiology, Chemistry or Microbiology) that are more than five years old before admission into the MLT Program will need to be updated in one of five ways:

- 1. Retaking the course and earning a minimum grade of a C.
- 2. Documentation of relevant and recent experience in the field of content.
- 3. Challenge the examinations resulting in academic credit of a minimum grade of a C.
- 4. Completion of self-study review with examinations and/or portfolio assessments.

(Most Common)

5. Any combination of the above.

Advance Standing Consideration

Consideration for Advanced Standing is as follows:

- 1. Transfer (credit without challenge)
 - You may be given credit for MLT course work only after evidence that studies pursued or the skills acquired are equivalent in the course content AND credit hours.
- 2. "Quiz-Out" (credit with challenge)
 - You may challenge for credit in a didactic MLT course after providing evidence of background for doing so. The challenge exam will include theory and practice and may include a demonstration of fundamental skills.
 - You must take the challenge exams prior to or during the first week of the course offerings.
 - You may challenge a particular area of the MLT Program only once.

If you are enrolled in the MLT Program AND you are certified as a phlebotomist by ASCP or ASPT, you may request experiential credit for the Principles of Phlebotomy course and clinical practica. You would need to request and complete the necessary paperwork, provide proper documentation, and pay the associated fees. Please see your advisor for assistance.

Assessment

At BCC, initial enrollment into any English or Math class is dependent upon assessment scores. The assessment tools used at BCC are ACT and ASSET testing. Assessment provides both you and your adviser an effective tool to assure academic success. Through enrollment in appropriate courses, you are more likely to successfully meet your academic goals in the shortest amount of time.

Curriculum template /Curriculum semester guide

http://docs.bartonccc.edu/Curriculum%20Guides/Medical%20Laboratory%20Technician/AAS-Cur-MLT. pdf

^{*}see appendix

Course Sequence

The suggested course sequence shown here leads to an Associated of Applied Science degree.*

1st Year – Fall Semester
College Algebra
Principles of Microbiology
English Composition I
Major Elective
Principles of Phlebotomy***
1st Year - Spring Semester
Fundamentals of Chemistry
OR College Chemistry I
General Psychology
Interpersonal Communications. 3
OR Public Speaking
Anatomy & Physiology**
1st Year - Summer
MLT: Phlebotomy Clinical Practicum***
2nd Year – Fall Semester
MLT: Urinalysis/ Body Fluids
MLT: Clinical Microbiology I
MLT: Clinical Chemistry I
MLT: Seminar in Laboratory Medicine
2nd Year – Spring Semester
MLT: Blood Banking
MLT: Clinical Microbiology II
MLT: Clinical Chemistry II
MLT: Hematology/ Coagulation
MLT: Immunology/ Serology3
MLT: Capstone Seminar in Laboratory Medicine
2nd Year - Summer
MLT: Clinical Practicum I
MLT: Clinical Practicum II
Total71

^{*}The granting of the degree is not contingent upon your performance on any type of external certification or licensure examination.

If you are planning on transferring to a 4 year institution, please consult with your advisor.

^{**}If you have completed an introductory college biology course with lab, you may request that it be considered in lieu of Anatomy & Physiology. You must provide the syllabus from the course.

^{***}ASCP/ASPT Phlebotomy Certification transfers in for these 4 credit hours.

MLT Course Descriptions

MLTC 1500 MLT: Introduction to Medical Laboratory, Urinalysis & Body Fluid (3 Credit Hours offered fall)

Prerequisite: Acceptance into the Medical Laboratory Technician program or instructor permission.

An introduction to the medical laboratory and routine urinalysis, a survey of special urinalysis and body fluids analysis. Proper use and care of related laboratory equipment and basic quality control is demonstrated.

MLTC 1501 Phlebotomy Clinical (1 Credit Hour by appointment)

Prerequisite: MLTC 1503 or equivalent with a C or better

Practical experience in specimen collection at a health care facility. Requires a quota performance to meet certification agency guidelines.

MLTC 1502 MLT: Hematology & Coagulation (5 Credit Hours offered in the spring)

Prerequisite: Instructor permission

A study of the development and pathology of the blood cells, and the mechanisms of blood coagulation. Contemporary methods of testing in Hematology and Coagulation, including the blood smear, are covered. Proper use and care of related laboratory equipment is demonstrated.

MLTC 1503 Principles of Phlebotomy (3 Credit Hours offered fall, spring and summer)

Prerequisites: none

The course will emphasize safety, specimen collection (venipuncture and capillary puncture) and specimen processing. ASCP phlebotomy certification is equivalent.

MLTC 1504 MLT: Clinical Chemistry I (4 Credit Hours offered fall)

Prerequisites: CHEM 1802 or equivalent

A study of the physiology and pathology of various chemicals in body fluids. Classical and contemporary methods of testing in clinical chemistry are covered. Proper use and care of related laboratory equipment is demonstrated.

MLTC 1505 MLT: Clinical Microbiology I (5 Credit Hours offered fall)

Prerequisites: LIFE 1412 or equivalent

A study of the pathogenic bacteria and normal human flora. Contemporary methods of examination and identification of common bacteria are covered. Proper use and care of related laboratory equipment is demonstrated.

MLTC 1506 MLT: Clinical Microbiology II (3 Credit Hours offered spring)

Prerequisite: LIFE 1412 or equivalent

A survey of special microbiology, including mycobacterium, viruses, parasites and fungi that cause disease in man. Methods of examination and identification of these microorganisms is covered

MLTC 1508 MLT: Blood Banking (5 Credit Hours offered spring)

Prerequisites: Instructor permission

A study of the various blood group systems. Methods of blood group antigen identification, antibody identification and compatibility testing are covered. Proper use and care of related laboratory equipment is demonstrated.

MLTC 1509 MLT: Immunology & Serology (3 Credit Hours offered spring)

Prerequisite: Instructor permission

A basic study of the theory and principles of the immune response and antigen-antibody interaction. Common serological procedures are covered.

MLTC 1510 MLT: Clinical Chemistry II (2 Credit Hours offered spring)

Prerequisite: Chem 1802 or equivalent.

A study of automation, immunoassay, electrophoresis and miscellaneous topics in clinical chemistry.

MLTC 1511 MLT: Seminar in Laboratory Medicine (1 Credit Hour offered fall)

Prerequisite: Instructor permission.

A study of selected laboratory analyses and topics including ethics, professional journal interpretations. You will learn about stress, its management and time scheduling.

MLTC1513 Capstone Seminar in Laboratory Medicine (1 Credit Hour offered spring)

Prerequisite: Instructor Permission

A study and review of laboratory mathematics, educational opportunity and building of an employment portfolio including mock job interviews. Includes time scheduling and professionalism along with review for certification exam..

MLTC 1514 Med Lab: Directed Studies (1-4 Credit Hours by appointment)

Prerequisite: Instructor permission.

An individualized plan of study designed to supplement previous coursework. For the transfer or advanced standing student. Study may include any subject area of Medical Laboratory Technology. May be repeated.

MLTC 1519 MLT: Clinical Practicum I (2 Credit Hours by appointment)

Prerequisites: MLTC 1500, MLTC 1502 and MLTC 1509 or equivalent

Practical experience at an affiliated clinical laboratory in specimen collection, urinalysis, hematology, coagulation and serology. This clinical experience is designed to complement the instruction received in the campus or cooperative lab.

MLTC 1501: Phlebotomy Clinical (1 Credit Hour by appointment)

Prerequisite: MLTC 1503 or equivalent.

100 hours of practical experience in specimen collection and processing. This clinical experience is designed to complement the campus or cooperative lab experience and meet the requirements for the phlebotomy certification exam. ASCP phlebotomy certification is equivalent.

MLTC 1520 MLT: Clinical Practicum II (4 Credit Hours by appointment)

Prerequisites: MLTC 1504, MLTC 1505, MLTC 1506, MLTC 1508, MLTC 1510, and MLTC 1511 or equivalent.

Practical experience in an affiliated clinical laboratory in blood banking, chemistry and microbiology. This clinical experience is designed to complement the instruction received in the campus or cooperative lab.

Grading for MLT courses

The grading scale for all MLT courses (except Principles of Phlebotomy) is:

Letter Grade	Performance Level	
A	93-100%	
В	86-92%	
C	78-85%	
D	71-77%	
F	less than 70%	

The grading scale for Principles of Phlebotomy is:

Letter Grade	Performance Level	
A	90-100%	
В	80-89%	
C	70-79%	
D	60-69%	
F	less than 60%	

If you have any questions about the grading process, please consult with your instructor.

Exam Makeup

MLT exams are to be taken as scheduled by the course instructor. Please refer to each course syllabus for more details.

Lab Makeup

The laboratory component of the MLT courses are to be performed as scheduled by the course/cooperative lab instructor; and according to the attendance policies of the college and the program. Makeup labs, if allowed by your instructors, will be at the instructor's discretion.

This is applicable to both campus and distance learning students and their cooperative lab instructors.

Remedial Activities due to Lack of Exam Mastery

If you score less than 70% on an exam (78% is passing), at the discretion of the course instructor, you may be required to complete remedial activities. Please refer to the individual course syllabus for more details. If you are continuously scoring below 78% after discussions with the instructor; see your advisor to discuss options, including withdrawing from the course.

POLICIES FOR CLINICAL PRACTICA

Description of Clinical Practica

- Clinical practica are scheduled clinical "internships" performed at a clinical laboratory that is a formal clinical affiliate of BCC's MLT Program.
- Phlebotomy Clinical is comprised of 100/120 hours of clinical experience in the area of specimen collection and processing.
- Clinical Practicum I is comprised of clinical experience in the areas of specimen collection, urinalysis, hematology, coagulation and serology. To complete Clinical Practicum I, you must document a minimum of 220 hours of clinical experience (less any advanced placement), and meet the criteria stated in the "Grading--Pass/Fail Criteria" section that follows.
- Clinical Practicum II is comprised of clinical experience in the areas of blood banking, chemistry and microbiology. To complete Clinical Practicum II, you must document a minimum of 400 hours of clinical experience (less any advanced placement), and meet the criteria state in the "Grading--Pass/Fail Criteria" section that follows.

Eligibility for Clinical Practica

To be eligible for a clinical practicum, you must first satisfactorily complete with a "C" or better all courses listed as prerequisites for the respective practicum. You will not be allowed to enroll in Clinical Practicum I until all required MLT courses are completed successfully. You will not be allowed to enroll in Clinical Practicum II until all required MLT courses are successfully completed. In addition, you must meet the Essential Functions as listed in this MLT Student Handbook.

Advanced Clinical Placement

Before you are enrolled in a Clinical Practicum, and if you have extensive clinical laboratory experience; you can request consideration for advanced placement for some or all of that work experience. Your laboratory experience must be part of your job description, financially compensated for and completed before you enter the MLT Program to qualify for advanced placement. If you feel you are eligible for advanced placement, contact the MLT Program Director. lippertc@bartonccc.edu

All credentials presented in support of an applicant receiving Advanced Standing will be individually evaluated, and decisions made in one case are not to be interpreted as precedent in other cases.

Consideration for Advanced Standing:

- Transfer (credit without challenge)
 - O You may be given credit for MLT course work only after evidence that studies pursued or the skills acquired are equivalent to the course content and credit hours
- Quiz Out (credit with challenge)
 - O You may challenge for advanced placement in a clinical course after providing evidence of background for doing so.
 - O You must present documentation of skills with a letter from your laboratory supervisor listing your dates of employment, your job description (general duties) and those procedures for which you are considered competent. These forms are available from the program director.

Assignment to Clinical Practica

The MLT Program Director will determine your assignment to the affiliated clinical facilities. You will be asked to provide a prioritized listing of your choices for placement for your clinical practica rotations. It is important you recognize that the MLT Program cannot guarantee that you will be assigned to your first choice.

- The Phlebotomy Clinical is available upon successful completion of the Phlebotomy course with a "C" or better within the previous 3 years.
- Hematology/Coagulation, MLT Immunology, and Urinalysis/Body Fluids must be completed with a "C" or better before you will be allowed to do Clinical Practicum I.
- MLT Microbiology I & II, MLT Chemistry I & II, and Blood Bank must be completed with a "C" or better before you will be allowed to do your Clinical Practicum II.

If you feel that, for whatever reasons, you must limit your choices of placements for clinical practica, you can request to delay your placement until later in the program. Even then, the MLT Program cannot guarantee that you will be assigned to your first choice at the time requested.

Placement is based on a number of criteria, the foremost of which are:

- 1. The number and variety of student clinical spaces available.
- 2. Consideration will be given to the student's employment issues and to Clinical Site Coordinator requests.
- 3. Students employed by their Clinical Sites will be given priority over other students.
- 4. Full time students in good standing will be given priority over part time students in good standing
- 5. Part time students in good standing will be given priority over students with attendance issues and multiple learning agreements.
- 6. Students will not be placed in a Clinical Setting with relatives. This can be discussed on a student by student basis.

It is your responsibility to provide transportation to and from, or provide residence near, the assigned clinical facility.

The MLT Program will strive and plan to provide timely clinical practica for all students. However, circumstances can change that are beyond the control of the Program. In the event that there would not be a sufficient number of clinical placement positions for all students completing the didactic semester, clinical assignments will be made on the basis of the above criteria, then also with consideration of grade point average, attendance, and professional behavior assessments.

Scheduling of Clinical Practica

Scheduling of the dates AND times of your clinical experience is at the discretion of your assigned Clinical Affiliate laboratory.

The general expectation is that your clinical schedule will be "day shift," Monday through Friday, for eight hours a day, and five days a week, until you have met the specified time requirement AND you are deemed competent in the relevant areas. Assignment of any other **schedule** must be agreed upon by the MLT Program Director and the respective Site Coordinator

Assignment to Shifts

Assignment to any times other than the "day" shift, Monday through Friday must be agreed upon by the MLT Program Director and the respective Site Coordinator.

Service Work Policy

Service work is work which students may be able to perform after they have shown proficiency in a specified area. As part of your clinical experience you may perform procedures, run instruments, or man a work station. However, you are to be working under the supervision of a clinical instructor, and at all times during the clinical practica, any laboratory reports you complete must be co-signed.

Practices in which students are substituted for regular staff must be avoided. However, you may seek employment by the laboratory to which you are assigned for Clinical Practica. The affiliation agreement states that: "The students' rights to secure employment in their free time shall be the same as the rights of other students to secure voluntary employment."

Attendance/Absenteeism

Due to the technical nature of the material being presented, you must exhibit regular attendance at all times. You will be allowed no leave during the Clinical Practica – any time missed must be made up.

If you exhibit excessive absenteeism (considered by the Barton MLT Program to be > 13% of scheduled clinical days) you will be required to meet with the MLT Program Director and/Site Coordinator. A Record of Counseling will be initiated and may lead to a Learning agreement and a Contract for Continuation. Your status in the program may be affected up to and including dismissal

Chain of Command

Your primary responsibility is to the MLT Program Director. In turn, you are also responsible to the Laboratory Supervisor of the coop/clinical facility, the Site Coordinator of the coop/clinical facility, and to the Clinical Instructor to whom you are assigned. (These may be the same person). While assigned to a clinical facility you must follow all personnel regulations of the facility, including the dress code, late and absence call in and scheduling issues. You are being supported by these clinical affiliates to complete your education as a professional. Be Respectful.

Grading – Pass/Fail - Criteria

To pass the Clinical Practica you must:

- Follow all policies, procedures and rules of the clinical facility.
- Promptly notify the Site Coordinator whenever you are unable to report as scheduled.
- Document the respective number of hours of supervised experience for the designated Clinical Practicum or equivalent.
- Submit WEEKLY signed and initialed up-to-date time logs and daily diaries to the MLT Program Director or other designated program official as requested or specified.
- Complete the required number of all tests/procedures that are listed with minimum tallies on the tally sheets and submit at end of rotation.
- Perform at the specified level for all Performance Competencies related to the respective Clinical Practicum.

Delay in submitting WEEKLY records can delay your grade.

YOU, the student, have the final responsibility for submission of all appropriate forms to the MLT Program Director. The assignment of a Pass or Fail grade is based on the above criteria and is the responsibility of the MLT Program Director.

Policies and Procedures for MLT Department

Attendance

As part of its mission to improve your social, economic and personal life, the College acknowledges its responsibility to prepare you for future academic and professional endeavors. Therefore, you are encouraged to develop a professional ethic that reflects personal responsibility, personal initiative and teamwork. In context to that commitment, you are required to attend all classes. When you are absent from class, you not only miss a part of the subject matter of the course, but you also diminish the opportunities for contributing to the learning environment. Poor attendance in class may cause you to lose your financial aid according to

federal guidelines and irresponsibility will diminish your professional and academic progress.

Campus students must exhibit regular attendance at all times at the Great Bend site. Distance learning students must maintain a portfolio that contains appropriate and up-to-date time logs and lab exercise documentation for each course as well as submitting requested documents at the time intervals requested. You must maintain contact with the course instructor and any other program officials as specified (i.e. your advisor), as well as participate in threaded discussions within your course.

If you, the student, exhibit excessive absenteeism (>=13% of specified program contacts) you will be required to meet with the MLT Program Director, your advisor, and course and/or lab instructor. A Record of Counseling will be completed and a Learning Agreement signed. You may also be required to sign a Completion Intent Form. Failure to fulfill the Learning Agreement may impact your clinical practicum placement or result in **dismissal** from the program.

Critical Incidents

Critical incidents can impede or disqualify you from attaining the professional affective behavioral skills and affect your program acceptance and/or program progression.

Critical incidents that will result in **automatic removal** from the program and the grade of "F" for the course(s) are:

- Cheating during exams, quizzes or exam reviews.
- Intentionally falsifying laboratory data. Falsifying time logs, signatures, and initials.
- HIPAA violations/ breaches of confidentiality.

Critical incidents which result in a **Record of Counseling** which could lead to a **Learning** Agreement and potential program dismissal, include, but are not limited to:

- Unexcused absences or tardiness to scheduled lab or clinical experiences.
- Failure to notify instructors, in a timely manner, when there is an unexpected absence for an emergency.
- Failure to follow standard Universal Safety Precautions or OSHA regulations in the laboratory.
- Bringing food/drink into the lab or storing such in any lab refrigerator or freezer.
- Failing to properly and promptly clean up spills or broken glass.
- Leaving work area "dirty", failing to properly wash hands and equipment.
- Unauthorized disclosure of patient (unknowns) information.
- Collecting specimens or reporting test results on the wrong patient (unknowns).
- Failing to identify and correctly report a critical patient value.
- Reporting test values incorrectly (i.e. decimal errors, miscalculations, inaccurate units, etc.).

• Violation of confidentiality

Academic Progress

To be granted the AAS-MLT you must receive a grade of *C* or better, or a pass grade in every course in the AAS-MLT curriculum. Failing grades may affect your financial aid, initiate a Record of Counseling which may lead to a Learning Agreement or result in dismissal from the program.

If you receive a grade less than a C, an I (incomplete) or a midterm low grade report, you are required to meet with your advisor and bring your completed Plan For Academic Success (see appendix forms). You must meet with your advisor before you will be allowed to enroll into the next semesters MLT courses. You will be responsible for making the appointment with your advisor.

See the following link for financial aid and academic progress as defined by Barton Community College in the Barton Student Handbook p.(16-17)

Disciplinary Actions

If you exhibit excessive absenteeism, inappropriate professional behavior and/or fail to achieve appropriate academic progress or clinical performance, you will be required to meet with the Program Director/course instructor and a Record of Counseling* will be used to document the meeting. If corrections to the documented behavior are not evident, a Learning Agreement* will commence. When students are unable to improve their academic performance or behavior and fail to meet the conditions of their Learning Agreement, they are subject to dismissal from the academic program.

*these forms are located in the appendix of this handbook.

The following definitions are provided for additional understanding of the MLT program's policies and procedures.

Record of Counseling

A Record of Counseling documents issues and circumstances involved in a specific situation. A Learning Agreement generally results from a record of counseling. A Record of Counseling may be created for issues within a course or within the program. Student dismissal will not result from a record of counseling, but dismissal may occur in response to a learning agreement.

Learning Agreement

A learning agreement is a written document identifying facts pertinent to a student problem and the identified steps to address the area(s) of concern. Learning Agreements may be cumulative and lead to the student's dismissal from the program. A decision made by the MLT Program Director to dismiss a student may be appealed utilizing the appeal procedure afforded to students through the Student Code of Conduct Policy. The policy is available in the College's Student Handbook found on the Barton website.

Dismissal

When students are unable to improve their academic performance or behavior and meet the conditions of a corrective action plan, they are subject to dismissal from the academic program. Students in dismissal status for an academic program may not continue their studies in the program, but may decide to pursue their education with a different program at the institution.

Dismissal status is considered permanent; however a student may request permission to return to a Barton program from which they were dismissed. The student requesting permission to be readmitted must follow the readmission policy of the specific academic program.

A decision made by the MLT Program Director to dismiss a student may be appealed utilizing the appeal procedure afforded to students through the Student Code of Conduct Policy. The policy is available in College's Student Handbook found on the Barton website.

Immediate Removal

Certain behaviors and conduct may result in immediate removal from the program. Students who are immediately removed may pursue their education with a different program at the institution, but may not continue in the program from which they were removed. Dependent upon the reason for immediate removal; the student may be eligible for readmission to the program at a future time. A removed student seeking readmission must meet all program readmission requirements as well as an interview with the program Director or instructor and Executive Director. A decision made by the MLT Program Director to remove a student may be appealed utilizing the appeal procedure afforded to students through the Student Code of Conduct Policy. The policy is available in College's Student Handbook found on the Barton website.

Advisement

Upon acceptance into the MLT program, you will be assigned an advisor from the MLT faculty. The advising faculty co-advise, therefore any MLT advisor may assist you. It is your responsibility to consult with them at least once, or more, each semester to review your progress toward graduation. There is a student advisement day every semester that is published on the Barton website. Please take advantage of it. It is YOUR responsibility to ascertain that you have completed all the courses needed to fulfill your degree requirements. At any time, for information or referral assistance, contact your advisor for help.

Files

You have access to your general college student files by following the Barton guidelines located in the Barton Student Handbook. You may have access to your MLT file by written request of the MLT Program Director.

Safety Polices

General laboratory safety is required due to the nature of the potentially hazardous materials and situations. You will be reminded of the need to practice the safety techniques you will be taught, throughout the curriculum. The MLT campus cooperative laboratory in S-116, maintains a safety manual for your reference and you may ask you instructors specific safe practice questions. All laboratories require safety as a priority. You will adhere to the prescribed safety guidelines whenever you are in any medical laboratory. Violations of laboratory safe practices may cause you to be suspended or dismissed from the program.

Special Note: For safety, children and non MLT students are not allowed in the Great Bend campus lab setting.

If you have any concerns about your safety at your cooperating laboratory or clinical affiliate, discuss them with your site instructor/coordinator. If you are not satisfied notify your Barton instructor and the MLT Program Director.

Dress Code

Part of safe laboratory practice involves appropriate dress. A fluid resistant, fastened laboratory coat should be worn over your clothes when you are in any medical laboratory. If the coat becomes torn, stained or otherwise damaged; notify the instructor to request a replacement. Dispose of the damaged coat as appropriate.

- All laboratories require closed toe shoes.
- Wearing of apparel appropriate for a professional atmosphere, even under a lab coat, is required.
- Students at a cooperative lab or clinical practicum must abide by their teaching laboratory's dress code.
- If your hair is more than shoulder length or is long enough to meet under your chin when you lean forward, you need to tie it back. Handling your hair with contaminated gloves is unsafe, so if in doubt; tie it up.

You will be provided a Barton student name tag, which is to be worn whenever you are logging time as a student in a laboratory, be it campus, co-op or clinical affiliate.

Resources

The Science/Math building, room S-116 is the dedicated MLT laboratory. It is fully equipped with modern laboratory equipment, and safety supplies including an eye wash station, biological safety cabinet, hand washing stations, fire extinguisher and a fume hood, safety shower and fire blanket in an adjoining laboratory. The Laboratory Safety Handbook and MSDS information are posted in the room.

MLT classroom instruction takes place within the Science building and online. The offices for MLT personnel are in the Science/Math building, in the North office complex and S114.

Barton's Library contains an extensive collection of books, periodicals and other reference materials related to clinical laboratory science. The students have access to all of the services of Barton's Library whether on campus or through interlibrary loan services. There are reference books and periodicals in the MLT computer lab similar to the cooperating/clinical laboratories for the distance learning students.

Textbooks are available through the online bookstore or using the ISBN to purchase your textbooks. The MLT Program will provide other instructional resources, such as a subscription(s) to selected tutorial software.

Barton's MLT courses are technology-enhanced and you can benefit most if you have your own computer. You must have a computer, reliable internet access and the support of a cooperative lab to be a successful MLT student.

College Policies and Procedures

For current policies and procedures, check the <u>Barton website</u> and refer to Barton's Student <u>Handbook</u>.

Admission to the Barton Medical Laboratory Technician Program

Program MLT Application and Admission dates are:

- Application process and scheduling of interview to be considered for program entry into the fall MLT courses must be completed by April 15th.
- Application process and scheduling of interview for entry into the spring MLT courses must be completed by October 31.

The procedure for application and admission to the program are as follows.

- 1. Apply to Barton Community College for admission.
- 2. Apply to Barton's MLT Program.
- 3. Have all official high school and college transcripts on file with the Barton registrars' office before your MLT interview.
- 4. Complete a background check (Verified Credentials) before your interview.
- 5. Complete the <u>Physical</u> form using the <u>essential function</u> form and submit via Verified Credentials.
- 6. Complete the <u>Immunization</u> form and submit via Verified Credentials.
- 7. Complete the <u>Health</u> form and submit via Verified Credentials.
- 8. Return signature sheet and the form for the classroom behavior from (MLT Student Handbook link).(form at end of HB)
- 9. A student NOT using the Great Bend campus cooperative lab could be employed in the facility that is supporting their education.

- 10. A student not using the Great Bend campus cooperative lab needs to have a Notice of Understanding from their prospective Cooperating Laboratory submitted before their interview.
- 11. A copy of your current CPR card needs to be uploaded to Verified Credentials before your interview. Barton campus offers CPR for MLT students in Feb.
- 12. You are required to keep health insurance on yourself while you are in the MLT Program*. Proof of insurance needs to be submitted to Verified Credentials before your interview. Continuation of current insurance will be confirmed periodically.
- 13. Your financial aid, if applicable, needs to be in place so you are not removed from your class due to non-payment.

*Barton provides liability insurance while you are enrolled in MLT courses Completeness of your file will be considered when scheduling your advisor interview.

Upon receipt of a minimum of two of your references and the above documents loaded into your Verified Credentials account; an interview will be scheduled with the Program Director or assigned MLT advisor for consideration of admission into the MLT Program.

At the interview you will be asked specific questions and your projected plan for how you would complete the program of study and your supporting laboratory. You will know at that point if you are accepted into the program or not, and whether you are a Pre-MLT student or an MLT program student.

Background Checks and Drug Screening

You are subject to a formal **background check** for the MLT program through Verified Credentials. For many of our cooperating laboratories and clinical affiliates, such background checks are required by law and regulation or are organizational policy. You are responsible for the costs of any background checks that are requested by the Program, a cooperating laboratory and/or clinical affiliate.

You are subject to unannounced **drug screening**. For many of our cooperating laboratories and clinical affiliates such drug screens are required by law and regulation or are organizational policy. MLT Program policies on drug screening reflect the College's substance abuse policies as described in the Barton Student Handbook and Academic Planner. Check with the MLT Program Director or your advisor if you have any questions.

PPENDIX

Program Personnel

Cheryl Lippert, MBA, MT(ASCP), CLS(NCA), MLT Program Director/Instructor

M.B.A.	William Woods University, Fulton, MO
B.S Medical Technology	Pittsburg State University, Pittsburg, KS
B.S. biology	Pittsburg State University, Pittsburg, KS

Dana Weber, B.S Information, MLT(ASCP) Faculty/Clinical MLT Instructor

Andrea Thompson, MLT(ASCP), BS Bio. **Associate Faculty** Georgiana Yasko, MT(ASCP) **Associate Faculty**

Grace Leu Burke, MT(ASCP) **Associate Faculty**

Secretary provides clerical support for the MLT Program. That office is S-127 in the Science Building, 888-423-1711. FAX 620-786-1164.

RECORD OF COUNSELING			
Date:			
Student:			
Issue:			
Action Needed; Notes:			
Signature of Advisor/Instructor:			
Student Response:			
Signature of Student:			

Barton Community College

MLT Program

Learning Agreement

STUDENT:	DATE:	
PERTINENT FACTS:		
STUDENT RESPONSE:		
CONFERENCE DECISION:		
FACULTY MEMBERS:		
TAGGETT MEMBERO.		
SIGNATURE OF STUDENT:		
This form will be kept in the student MLT file. Student may request a copy.		

Adopted: 5-78 Revised: 2-11cal

> **BARTON COMMUNITY COLLEGE Completion Intent Form**

Academic year 2015-2016

1.							
	Last Name	First	Mid	dle	ID Numbe	er	
2.	I entered the program in:	Fall year		Spring yea	 ar	Summer	ear
3.	I intend to complete a pro	gram of study	in the fol	lowing:			
	Certificate Programs/Con	<u>centrations</u>		<u>Degre</u>	ee Programs	<u>i</u>	
	Emergency Medical	Technician		Mobile Ir	ntensive Car	e Technician	(AAS)
	Natural Gas Technic (16 hour certificate, l Natural Gas Technic (33 hour certificate le	ess than one i	•	Natural (Gas Technici	ian (AAS)	
	Natural Gas Technic (16 hour certificate, o Natural Gas Technic (33 hours certificate,	one year in ler ian	,				
	Phlebotomy Training	l			Lab Technic Assistant (A	, ,	
	nderstand that by signing this d rect.	ocument, I an	n certifyin	g that the inforn	nation is repo	orted as true	and
4.							
	Student's Signature		Date	Advisor's Sigr	nature		 Date

Please return this form to: Director of Financial Aid at Barton Community College

Medical Laboratory Technician Program Barton County Community College Guidelines for Selecting a Proctor

Proctors must be approved by the MLT Program instructors.

Proctors may be, but are not limited to, the following:

- Professional staff of a medical facility (department supervisor or higher level)
- Professional consultant for a medical facility
- Librarian or someone in an administrative position at a library
- Professional teacher at an accredited institution of learning
- Professional staff member of the adult or continuing education office or testing center at an accredited institution of learning
- Military officer (at a higher rank than the student) or a military educational services officer
- Corporate or government agency education official (corporate trainer, human resources staff member, development coordinator, etc.)
- Human resource professional or employee development coordinator
- Ordained clergy member (Minister, Priest, Rabbi, Pastor, etc.)
- Civil service examiner
- Judge of a court of law

Proctors may NOT be:

- Any relatives including non-blood relatives or exes.
- Personal friends
- College peers
- Current students
- Neighbors

Proctoring should take place in a public facility, and not in the home of the proctor or the student.

For clarification, contact the MLT Program Director at Barton Community College (888-423-1711).

By my signature I agree to proctor examinations for persons taking MLT courses from Barton Community College, Great Bend, KS. I will see that the students take the examinations honestly and according to directions on the Proctor Report.

If I cannot administer the examination within the time frame specified by the instructor (e.g. because I am on vacation or attending a conference), I will delegate those responsibilities to an appropriate designee.

I understand that I will not be paid for this service, but I will proctor these examinations to help the individuals involved. I will complete and submit a Proctor *Report* for each examination proctored.

Proctor Name:	
Home Address:	
Name of Company or Institution:	
Position:	
Business Address:	
Business Telephone Number:	
Fax Number:	e-mail:
Signature of Proctor	Date

Please list the name(s) of student(s) for wh	nom you've agreed to proctor exams:
	-
	-

Any questions? Call 888-423-1711 and ask for the instructor or MLT Program Director.

Barton County Community College Medical Laboratory Technician Program **Frequently Asked Questions** About **Proctoring**

If I agree to proctor the exams, what are my responsibilities? You are to directly monitor the student while they are taking exams, and you must complete and mail or fax a Proctor Report for each exam you administer. Please review the attached Proctor Report form. Students can print Proctor Report forms from each course exam page.

When do the courses start and finish? The fall semester begins in mid-August and ends in mid-December. The spring semester begins in mid-January and ends in mid-May. In unusual circumstances a student may receive an "I" (incomplete) grade and extend the time to complete the course

For what courses am I being asked to proctor exams? This depends on each individual student's curriculum plan. The student can tell you how many and which courses they are taking.

How many exams are there in the courses? This varies significantly from course to course...from as few as five to as many as twelve.

When are the exams? The schedule for each course is posted on its web page. The student can provide you with a schedule for each course. If the student does not complete the exam within the time frame specified in the course schedule, they can still take the exam by making arrangements with the course instructor, but their score will be docked.

Who are the instructors for the courses? The MLT instructors are Cheryl Lippert, Dana Weber, and associate faculty. The student can tell you the name of the instructor for each course.

How do I contact an instructor? Call Barton Community College at 888-423-1711...and the department secretary can direct you. Or you can email.

How much time does the student have to complete the exam? The amount of time the student has to take the exam can be set within the testing software. Usually, students are allowed 1 1/2 hours to take an exam. For final exams, students are allowed 2 hours.

Can the student use any resources while taking the exam? As noted on the Proctor Report, the student is allowed to use only blank paper, a pen or pencil, and a non-programmable calculator. You are to collect the "blank" paper after the exam and shred. The introduction page to each exam lists allowed tools

05/2014cal

Proctor Report

The student should complete this portion	of the Report
Student:	Date:
Course Identification (check one): Principles of Phlebotomy MLT: Intro,UA & Body Fluids MLT: Clinical Chemistry I MLT: Clinical Microbiology I MLT: Seminar in Lab Medicine	 MLT: Hematology & Coagulation MLT: Immunology & Serology MLT: Blood Banking MLT: Clinical Chemistry II MLT: Clinical Microbiology II (Parasitology/Mycology)
Exam name/#:	
The proctor or their designee should com	plete this portion of the Report
The student started the exam at	and completed the exam at
 above. My signature affirms that during the directly monitored the student The student did not access the Internet 	t or computer files other study materials available unless stated on the intro
The student is allowed to have a blank par non-programmable calculator. All blank p Exam Proctor and destroyed .	paper used during the exam must be collected by the
Comments: (also, report any technical pr	roblems or irregularities here)
Signature of Proctor or Designee	Date:
Printed name of Proctor or Designee	

MLT Cooperating Lab Information

Frequently Asked Questions About the Role of the Cooperating Laboratory

What is the role of a "Cooperating Laboratory?" The primary role of the cooperating laboratory is to provide basic skill development for the "online" option of the Medical Laboratory Technician Program at Barton County Community College. The "hands-on" instruction in the Cooperating Laboratory is to "mirror" the basic training received in the on-campus BCCC MLT Laboratory.

As a Cooperating Laboratory you agree to allow personnel from your laboratory to provide direct on-site supervision and basic bench instruction related to performance of routine laboratory procedures, to evaluate respective laboratory competencies, to serve as proctors for various examinations, and to give other valuable assistance as needed.

How much time per week is the student expected to be in the Cooperating Laboratory for the **specified learning experiences?** The student is expected to spend the same amount of time in their Cooperating Laboratory as the student using the Great Bend campus MLT cooperative laboratory for the same course. Some courses have no laboratory component...others require as much as 4 hours per week. See following pages for specific coop lab time requirements.

How does the student document their learning experiences? Students keep a log that details the amount of time and what they are doing in the cooperating laboratory...the log and daily diary must be daily initialed by the person who is supervising their learning experience, and weekly signed. The completed page must be signed by an instructor or lab manager before the STUDENT faxes it or uploads to their course drop box. Development of the required laboratory competencies can be documented by personnel in the Cooperating Laboratory using forms provided by the College to the student.

When do the courses start and finish? The fall semester begins in mid-August and ends in mid-December. The spring semester begins in mid-January and ends in mid-May. In unusual circumstances a student may receive an "I" (incomplete) grade and extend the time to complete the course.

For what courses would we provide a Cooperating Laboratory experience? This depends on each individual student's curriculum plan. The student can tell you how many and which courses they are taking. This also depends on the volume and variety of testing and staffing situation in your laboratory. The College staff, upon review of information about your laboratory, will determine its suitability to be a Cooperating Laboratory for the various courses in the MLT Program.

Who are the instructors for the courses? The MLT instructors are Cheryl Lippert, Dana Weber, Andrea Thompson, Georgiana Yasko and Grace Leu Burke. The student can tell you the name of the instructor for each course.

How do I contact an instructor? Call Barton County Community College at 888-423-1711.....tell the secretary what you need and she will see that you get the correct person.

Clinical Facility Fact Sheet (CLS/MT & CLT/MLT)

Institution:				
Address:				
City, State, Zip Code:				
Telephone: ()	Fax: ()	
Accredited by: Please c	ircle appropriate agency; JCAHO	CAP	COLA	List Other
If you are not accredite Measures" form.	d by any of the above agencies, ple	ease con	nplete the '	Documentation of Safety
Clinical Coordinator or	Contact Person at site: (name)			
	(Email)_		_	
Clinical Laboratory Vo	lume (specify annual number of pr	ocedure	s):	
Indicate whether tests a	re performed in the following area	s:		
Hematology:	Chemistry:		Mic	robiology:
Immunology/Serology:	Immunohematology:		Uriı	nalysis:
Molecular Diagnostics:				

Daytime laboratory staff (convert part-time to full-time equivalent):

Barton Community College Medical La	aboratory Technology Student Handbook 42
Clinical Affiliate Name:	_ Date:
*Note: if not accredited by Joint Commission, COLA	A, CAP, CLIA, provide a list of safety equipment
Does the Laboratory Policy and Procedure Manual c emergencies in the following areas?	contain information about and procedures for
1. Biohazards, lab orientation and safety, and PPE?	Yes No
2. Chemical accidents?	Yes No
3. Slips and spills?	Yes No
4. Fire safety and emergency procedures?	Yes No
5. Electric hazards?	Yes No
6. HIPPA?	Yes No
7. Other	
8. Other	
9. Other	
Please list frequency of employee orientation	
Please list frequency of updates	
Please list safety equipment available in your labora	atory, i.e. Safety shower, sharps containers, PPE

Printed name of individual completing this_____

Coop Lab hours for MLT Courses

Phlebotomy 16 to 32 hours during the semester to develop basic specimen collection skills

Fall MLT courses:

- Intro, UA & body fluids: 2 hrs/wk
- Clinical Chem I: 4 hrs/wk
- Clinical Micro I: 4 hrs/wk; ideal 1 hr for 4 consecutive days, at least 2hrs for 2 consecutive days
- Seminar in Lab Med: no coop lab requirement (access to medical lab journals)

Spring MLT courses:

- Hematology & Coagulation: 4 hrs/wk
- Immunology, Serology: 2 hrs/wk
- Clinical Chem II: field trips
- Clinical Micro II: no coop lab requirement
- Blood bank: 4 hrs/wk
- Capstone Seminar in Lab Med: no coop lab requirement (access to medical lab journals)

The MLT courses are offered once per year, either fall or spring on 17 week semester. Phlebotomy is offered at a minimum of once per semester, 17 weeks course in spring and fall, 9 weeks in summer.

Barton County Community College MLT Program

Notice of Understanding for *Cooperating Laboratory*

Student:	
Nature of the Cooperating Laboratory Ex	xperience:
MLT Program or	
Phlebotomy Training	
Name of Cooperating Laboratory:	
Printed Contact Name:	
Address:	
City/State/Zip Code:	
Telephone:	Email:

When signed by the appropriate parties, this **Notice of Understanding** indicates that the College and the Cooperating Laboratory, both being desirous of cooperating in a plan to provide education experiences for medical laboratory technology and phlebotomy students, both mutually agree as follows:

Within the terms of this Notice, the **Cooperating Laboratory** will:

- Maintain the standards necessary for a medical laboratory as specified by State and Federal guidelines
- Retain responsibility for overall supervision and delivery of patient care
- Make available to the student the clinical facilities of the institution including necessary procedure manuals, equipment, supplies and available instructional materials
- Allow personnel from the laboratory to provide direct on-site supervision and basic bench instruction related to performance of routine laboratory procedures, to evaluate respective laboratory competencies, and to give other valuable assistance as needed
- Provide instruction for the basic training competencies within the course syllabi and help the student develop basic medical laboratory or phlebotomy competencies to the specified target level, not job entry level ready

- Provide adequate staffing in the clinical areas so that no student will be expected to give service to patients in the Cooperating Laboratory apart from that rendered for its educational value as a part of the planned medical laboratory technology or phlebotomy curriculum
- Provide liability coverage for the operation of its facility and to save and hold harmless the College for and against any and all liability for damages to any person and/or property of any and all persons resulting from negligent operations of the Cooperating Laboratory
- Regard students of the College, when assigned for clinical experience, as having the status of learners who will not replace the Cooperating Laboratory employees
- Retain the right to restrict a student, faculty member, or other agent of the College from participating in the clinical experience or from the Cooperating Laboratory grounds for good cause shown
- Ensure the provision of emergency care for illness or injury to the student paid for by the student.

Within the terms of this Notice the **College** will:

- Offer courses related to medical laboratory technology and phlebotomy
- Provide qualified instructors who will plan and coordinate the didactic learning experiences of the students
- Provide guidelines for the experience in the Cooperating Laboratory
- Maintain an appropriate certificate of insurance stating that each student and faculty member, while performing the duties or services arising in performance of this Notice, shall have liability insurance
- Hold the Cooperating Laboratory harmless from any and all liability for damages to any person and/or property of any and all persons resulting from the operations of the College's educational program

Within the terms of this Notice the **Student** will:

- Abide by existing rules and regulations of the Cooperating Laboratory
- Maintain the confidentiality of patient records
- Provide proof of meeting the requirements for immunizations as specified by the College (on file in the student owned Verified Credentials site)

- Maintain proof of medical insurance coverage (on file in the student owned Verified Credentials site)
- Hold the Cooperating Laboratory and the College harmless from any and all liability for damages to any person and/or property of any and all persons resulting from the operations of the College's educational program
- Reimburse the Cooperating Laboratory and/or the College for the cost of any damage to equipment used inappropriately or in a negligent manner.

Signature of Student	Date	
Signature of Laboratory Supervisor	Date	
Signature of MLT Program Director	Date	

MEDICAL LABORATORY TECHNOLOGY PROGRAM **Essential Skills Checklist**

Facility:
Please check each skill or procedure that your laboratory will be able to provide the MLT student as a cooperating and/or clinical affiliate.
PHLEBOTOMY
Patient identification procedures
Specimen collection by venipuncture
Specimen collection by skin punctures
Specimen processing
First year MLT courses
UA
Routine QC of reagents and equipment
Safety
Routine urinalysis: physical, chemical, and microscopic (normal & abnormal)
List backup (confirmatory) testing:
Urine /Serum pregnancy tests
Occult blood on stool
Body fluids
cell countmanualautomated
CSF
Synovial fluid
Amniotic fluid
Seminal fluid
Other: (please specify)
HEMATOLOGY/COAGULATION
Peripheral smears: evaluation of WBC, RBC & platelet morphology (normal & abnormal
wbc <1000, >50,000)
Polychromatic stain
Manual WBC count
Manual platelet count
Reticulocyte count
Erythrocyte sedimentation rate
Routine hematology analyzer: Operation, quality control, routine maintenance and basis
troubleshooting

Routine coagulation analyzer: Operation, quality control, routine maintenance and basic
troubleshooting for
Protime with INR
APTT
Fibrinogen
FDP or D-Dimer
Routine quality control of reagents and equipment
IMMUNOLOGY/SEROLOGY
Routine quality control of reagents and equipment
Safety
Agglutination methods (ie latex, heme):
Serial Dilutions
Syphilis Testing (VDRL/ RPR)
Chromatographic EIA (please list):
List kits tests performed:
Second year MLT courses
BLOOD BANK
Method: tube gel
ABO, Rh including weak D
Antibody screen
Crossmatch, immediate spin & complete
Direct antiglobulin test
Issue of product for transfusion
Cord blood testing: ABO, Rh, DAT
Routine quality control of reagents and equipment
CHEMISTRY
Routine chemistry analyzer: Operation, calibration, quality control, routine maintenance
and basic troubleshooting
Immunochemistry analyzer: Operation, calibration, quality control, routine maintenance
and basic troubleshooting
Routine blood gas analyzer: Operation, calibration, quality control, routine maintenance
and basic troubleshooting
Routine quality control of reagents and equipment
MICROBIOLOGY
Routine QC of reagents and equipment
Safety

Gram stain (preparation, interpretation, and performance)
direct
from culture
Culture setup and interpretation for the following: (colony morphology, Gram stain, routine
media & set up, interpretation)
Blood
Urine
Stool
Respiratory (upper, lower)
Genital
CSF and other body fluids
Wound
Identification of the following organisms:
Staph aureus
Coagulase negative staph
S. pyogenes
S. agalactiae
E. faecalis
S. pneumoniae
E. coli
Kleb pneumo
Proteus mirabilis
Ent cloacae
Salmonella
Shigella
Bacillus (not anthracis)
Corynebacterium spp.
Pseudomonas aeruginosa
H. influenza
Campylobacter jejuni
N. gonorrhoeae
N. meningitis
Automated identification (please list):
Antibiotic susceptibility testing
Automated panels
Kirby-Bauer
Other (please list)

Anaerobes (to what level)

	, E	<i>y</i>	
	collect and send		
	— ID only		
	ID and susceptibility		
Paras	itology (to what level)		
	collect and send		
	ID (wet mount, sedimentation	n, permanent)	
	ID serologically		
Myco	logy (to what level)		
	collect and send		
	ID (culture) send for ID		
	ID (serologically)		
Mycol	bacterium (to what level)		
	collect and send		
	ID (cult)		
	ID and susceptibility		
Name	of Clinical Laboratory	Signature of Lab Manager/Supervisor	Date

Barton Community College Medical Laboratory Technology Student Handbook 50

MEDICAL LABORATORY TECHNICIAN PROGRAM ESSENTIAL FUNCTIONS ACKNOWLEDGMENT

Introduction

Printed Name of Lab Manager/Supervisor

To become a competent Medical Laboratory Technician you must be able to perform routine medical laboratory procedures, as well as collect the specimens to be analyzed. Development of

these competencies requires certain physical capabilities. The following essential functions are the essential non-academic requirements of the Medical Laboratory Technician Program that you must master to successfully participate in the program and become employable.

Essential Functions

You must be able to effectively read, write and communicate, utilize a medical microscope, read instrument displays, and perform procedures that require eye-hand coordination. You must be able to discriminate color reactions.

You must be able to hear alarms that are used to signal instrument malfunction, fire or other emergencies.

You must be able to effectively manipulate medical laboratory equipment such as microscopes and pipettes, as well as the devices used to collect specimens. You must be able to, and develop the skill to collect blood specimens without undue trauma to the patient. You must be able to tolerate wearing gloves and other personal protective equipment as required.

Your general physical health must be such that you can perform light to moderate physical activity.

Your general mental health must be such that you can maintain attention to detail and interact effectively with other medical personnel and with patients under stress.

Refer to MLT Student Handbook for more details before signing this agreement.

		\mathcal{C}	\mathcal{C}	\mathcal{C}		
http://mlt.bartonccc.edu						
* * * * * * * * * * * * * * * * * * * *	* * * * * * *	* * *	* * *	* * * * *	****	****
* *						
Your signature attests that you have read and believe you can meet those standards.	d understand t	he E	ssentia	al Functio	ons and th	at you
Student Printed Name	-					
Student Signature			Б	• Date		