2022-2023

Columbia State Community College

CLINICAL PRACTICUM MANUAL

for

Medical Laboratory Technology Practicum I, II, III, IV

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I. **COLUMBIA STATE COMMUNITY COLLEGE**

MEDICAL LABORATORY TECHNOLOGY PROGRAM

The Columbia State Community College MLT program was terminated in approximately May of 2002. Area hospitals contacted the College in spring of 2015 and inquired about restarting the MLT program. In cooperation with several area hospitals, Columbia State Community College submitted a Letter of Intent to the Tennessee Board of Regents in June 2015 for a new MLT Program. The program proposal was subsequently approved by the college curriculum committee, the Tennessee Board of Regents, and the Southern Association of Colleges & Schools, Commission on Community Colleges (SACS-COC.) The inaugural cohort began core coursework summer semester 2017.

Medical Laboratory Mission Statement

The Mission of the Columbia State Community College MLT Program is to produce knowledgeable, competent, compassionate, professional Medical Laboratory Technicians.

I. A. INTRODUCTION

This manual provides information regarding the Medical Laboratory Technology Clinical Practicum courses for the COLUMBIA STATE COMMUNITY COLLEGE MLT Program. These courses will enable Medical Laboratory Technology students to gain clinical experience through cooperative efforts of COLUMBIA STATE COMMUNITY COLLEGE and regional health care facilities.

The content of this manual will explain the role and responsibilities of the clinical sites, MLT students, and the COLUMBIA STATE COMMUNITY COLLEGE MLT Program. It will also express the philosophy, procedures, and guidelines for MLT Clinical Practicum's I, II, III, and IV, as well as the organization and content of the COLUMBIA STATE COMMUNITY COLLEGE MLT Program.

This manual outlines what the MLT student should experience in their clinical training. Each clinical site is free to supplement the clinical Practicum training with activities unique to the clinical site.

I.B. COLUMBIA STATE COMMUNITY COLLEGE MLT PROGRAM GOALS:

Fulfillment of the MLT Programs Mission will be based on the following goals and outcomes based on student achievement.

Goal 1: Students will demonstrate knowledge consistent with the pathology of the field.

1.1 Students will recognize a pathology and the corresponding test results.
1.2 Students will communicate tests results to diverse healthcare team members.
1.3 Students will apply knowledge to laboratory skills required in a clinical setting.

Goal 2: Students will demonstrate competence in the field of Laboratory Medicine.

2.1 Students will perform laboratory testing with precision and accuracy.
2.2 Students will perform practice lab competency testing with precision and accuracy.
2.3 Students will comply with safety and governmental regulations.
2.4 Students will possess basic entry-level skills of a Medical Laboratory Technician.

Goal 3: Students will emulate the professional standards of the laboratory field.

3.1 Students will abide by the ASCP Code of Professional Behavior.
3.2 Students will adhere to medical facility guidelines.
3.3 Students will adopt positive working attitudes aligned with facility's mission and goals.
3.4 Students will respond appropriately to healthcare team members with respect.

Goal 4: Graduates will contribute to the needs of the Medical Laboratory field.

4.1 Admitted students will successfully complete the MLT Program.
4.2 Graduates will pass a nationally recognized laboratory exam resulting in certification.
4.3 Graduates will acquire a position as Medical Laboratory technician.
4.4 Graduates will express satisfaction with the educational experience.
4.5 Employers will express satisfaction with graduates as entry-level MLT's.

The MLT program mission and goals is consistent with the mission and goals of the college. Achievement of the goals is monitored annually via Outcomes Assessment plan.

I.C. COLUMBIA STATE COMMUNITY COLLEGE MLT PROGRAM CLINICAL PRACTICUM GOAL:

The Clinical Practicum experience provides students with an opportunity to reinforce classroom theory and activities with practical hands-on experiences and learn professional behaviors needed to become successful in the clinical laboratory science profession. The clinical experience also provides for the student to master the basic entry level skills needed by an MLT.

I. D.PROGRAM CURRICULUM

Upon completion of the COLUMBIA STATE COMMUNITY COLLEGE MLT Program, the MLT student will earn a two-year Associate of Applied Sciences Degree.
The following general MLT curriculum describes the course of study:

Course Rubric and Number recommended each semester	Course Title	Credit Hours	All courses will be available on-ground during the semesters indicated. Additional optional delivery methods indicated below:
First Year – Fall Semester			
ENGL 1010	Composition I	3	Online, Hybrid, or ROCC
BIOL 2010	Anatomy & Physiology I	4	Online or ROCC
MATH 1530	Elementary Statistics	3	Online, Hybrid, or ROCC
ADMN 1306	Medical Terminology	3	Online or ROCC
COLS 101	Columbia State College Success	1	
	Total Credit hours	14	
First Year – Spring Semester			
BIOL 2020	Anatomy & Physiology II	4	Online or ROCC
HUM/FA	Approved Humanities/Fine Arts	3	Online, Hybrid, or ROCC
BIOL 2230	Microbiology	4	ROCC
MLAB 1301	Intro to Medical Laboratory	3	
	Total Credit hours	14	
First Year – Summer Semester			
MLAB 2402	Hematology	4	
MLAB 2403	Clinical Microbiology	4	
MLAB 2202	Urinalysis/Body Fluids	2	
MLAB 2201	Clinical Immunology	2	
	Total Credit Hours	12	
Second Year – Fall Semester			
MLAB 2301	Blood Bank	3	
MLAB 1310	Practicum I	3	
MLAB 1320	Practicum II	3	
SPCH 1010	Fundamentals of Speech	3	Online, Hybrid, or ROCC
	Total Credit hours	12	
Second Year – Spring Semester			
MLAB 2310	Practicum III	3	
MLAB 2420	Practicum IV	4	
MLAB 2130	Seminar I	1	
MLAB 2401	Clinical Chemistry	4	
PSYC 1030	General Psychology	3	Online or ROCC
	Total Credit hours	15	

Note * - Students may be required to take additional Learning Support courses during the first semester.

MEDICAL LABORATORY TECHNOLOGY PROGRAM

CLINICAL PRACTICUM COURSE NUMBERS
AND DESCRIPTION

MLAB 1310 - Practicum I (3 SCH) This course is designed to give the student the opportunity to develop practical work related skills and integrate classroom knowledge and theories. This course will provide students with an intensive field experience in a medical lab real or simulated environment. Students must complete a total of 135 contact hours in field to receive 3 hours credit for this course.

MLAB 1320- Practicum II (3 SCH) This course is designed to give the student the opportunity to develop practical work related skills and integrate classroom knowledge and theories. This course will provide students with an intensive field experience in a medical lab real or simulated environment. Students must complete a total of 135 contact hours in field to receive 3 hours credit for this course.

MLAB 2310 Practicum III (3 SCH) This course is designed to give the student the opportunity to develop practical work related skills and integrate classroom knowledge and theories. This course will provide students with an intensive field experience in a medical lab real or simulated environment. Students must complete a total of 135 contact hours in field to receive 3 hours credit for this course.

MLAB 2420 – Practicum IV (4) This course requires students to apply critical thinking skills, problem solving and communication skills required in real or simulated environments. The students may be involved in a combination of clinical field placements, co-op assignments, and/or capstone experiences. Students must complete a total of 180 contact hours to receive 4 hours credit for this course.

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II. COLUMBIA STATE COMMUNITY COLLEGE MEDICAL LABORATORY TECHNOLOGY CLINICAL PRACTICUM

II. A. CLINICAL PRACTICUM DESIGN

Each fall semester (MLT Clinical Practicum I & II) consists of a minimum 17 day Practicums totaling 270 hours for the entire semester. On Thursday afternoons, the students will report to the classroom at Columbia State for an additional course in the MLT curriculum. Each clinical Practicum day should consist of an 8.0 hour workday spent at the bench except for Thursday.

MLT Clinical Practicum I and II

Students will complete MLT Clinical Practicum I and II in the fall semester. MLT theory courses of Hematology, Coagulation, and Microbiology, must be successfully completed in the summer semester with a passing grade of "C" or better to fulfill the pre-requisite requirements for the clinical Practicum in the related departments.

Immediately following the theory courses, student will attend their assigned clinical sites for Practicums. (Monday - Friday). Each Practicum consists of a minimum of 270 clinical/clock hours for the entire semester.

MLT Clinical Practicum III and IV

Students will complete MLT Clinical Practicum III and IV in the spring semester. MLT theory courses of Clinical Chemistry and Blood Banking must be successfully completed in the first part of the semester with a passing grade of "C" or better (as well as MLT Serology and Clinical Microscopy in the previous semester) to fulfill the pre-requisite requirements for the clinical Practicum in the related departments.

In the spring semester (MLT Clinical Practicum III & IV) consists of a minimum 40 days Practicums totaling 315 hours for the entire semester. On Thursday afternoons, the studetns will report to the classroom at Columbia State for an additional course in the MLT curriculum. Each clinical Practicum day should consist of an 8.0 hour workday spent at the bench except for Thursday.
The additional hours is allotted for additional learning experiences such as in the phlebotomy area. These occur each (Monday - Friday). Both practicums consists of a minimum 315 clinical/clock hours.

At the time when clinical assignments are made, more students may require clinical sites than can be accommodated by the sites already available. To provide clinical sites to students at the appropriate time in the curriculum, clinical affiliates may be added or additional Practicum periods may become available during the break following the originally scheduled semester.

II. B. ATTENDANCE/ABSENCES

Due to the nature of the COLUMBIA STATE COMMUNITY COLLEGE MLT Program, attendance for assigned days of the clinical Practicums is mandatory. Any assigned days of the clinical Practicum missed in whole or in part **MUST BE MADE UP**.

Students who are unable to report for clinical at the assigned time (for any reason) must call the clinical site as soon as possible. The student must also notify the MLT Program Director.

If a student knows, in advance that time will be missed, he/she should make advance arrangements with the clinical site for scheduled makeup time.

For any absence, a Student Absence Report form shall be completed by the clinical site supervisor/instructor. It will be the responsibility of the student to arrange with the clinical site supervisor/instructor a proposed makeup schedule for missed time.
A copy of the Student Absence Report form must be submitted to the COLUMBIA STATE COMMUNITY COLLEGE MLT Program Director upon absence and arrangement of a makeup schedule. The original Student Absence Report form must be submitted to the program director upon completion and documentation of makeup days.

Scheduling of makeup days is at the discretion of the clinical site supervisor/instructor.

It is the student's responsibility to complete the required number of hours for each Practicum. Failure to complete or make up required hours will result in assignment of an incomplete letter grade or "F" grade for the semester course.

Upon completion of all required days, the terminal evaluation may be completed and submitted. Course grades will be calculated and change of grade forms will be submitted.

Student Absence Report forms will be provided to the clinical site or may be copied from this manual.

II. C. GENERAL CLINICAL PRACTICUM OBJECTIVES

Upon completion of the clinical Practicums through each of the departments of the laboratory, the student should be able to:

1. Successfully perform venipuncture using syringes, vacuum tube systems, butterfly needles (if used), and heel and finger capillary punctures.

2. Properly identify patients, patient specimens, and patient results.

3. Label, process, and prepare blood and other samples for further testing.

4. Maintain accurate records.

5. Follow prescribed procedures and techniques in urinalysis, serology, hematology, immunohematology, chemistry, coagulation, and microbiology to obtain timely and accurate results.

6. Operate instrumentation in each laboratory department and perform minor repairs under close supervision.

7. Monitor and apply established quality control procedures daily.

8. Demonstrate proper laboratory techniques.

9. Discuss the principle and clinical significance of laboratory test methods performed.

10. Comply with recommended safety precautions and bloodborne pathogen standard practices.

11. Develop qualities of professionalism required of a Medical Laboratory Technician pertaining to appearance, ethics, confidentiality, reliability, and interpersonal communications.

12. Organize tasks in a manner which allows for effective completion of workload.

13. Identify inconsistent test results and bring to review of supervisor.

14. Follow written and verbal instructions and accept constructive criticism maturely.

15. Complete answers to study questions assigned for each sub -Practicum.

16. Demonstrate respect for patients, instructors, and fellow students.

17. Adhere to clinical facility policies (which may include vaccinations policies and exemption request).

II. D. CAREER ENTRY LEVEL COMPETENCIES

Upon graduation from the COLUMBIA STATE COMMUNITY COLLEGE MLT Program and initial employment, the medical laboratory technician should be able to demonstrate entry level competencies as listed in the *Standards of Accredited Educational Programs for the Clinical Laboratory Technician/Medical Laboratory Technician* published by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Rd, Suite 720, Chicago, Illinois 60018-5119; telephone 773-714-8880. A description of career entry level competencies includes:

At career entry, the clinical laboratory technician/medical laboratory technician will be able to perform routine clinical laboratory tests (such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular, and other emerging diagnostics) as the primary analyst making specimen oriented decisions on predetermined criteria, including a working knowledge of critical values. Communications skills will extend to frequent interactions with members of the healthcare team, external relations, customer service and patient education. The level of analysis ranges from waived and point of care testing to complex testing encompassing all major areas of the clinical laboratory. The clinical laboratory technician/medical laboratory technician will have diverse functions in areas of pre-analytical, analytical, and post-analytical processes. The clinical laboratory technician/medical laboratory technician will have responsibilities for information processing, training, and quality control monitoring wherever clinical laboratory testing is performed.

- The MLT will be able to:
    - Collect, process, and analyze biological specimens;
    - Perform laboratory tests and correlate the results in diagnosis and treatment;
    - Communicate sufficiently to serve the needs of patients, health care workers, and the public;
    - Possess technical training sufficient to orient new employees;
    - Monitor quality control within pre-determined limits;
    - Comply with laboratory safety and regulatory standards;
    - Utilize information processing in the clinical laboratory;
    - Recognize and exhibit ethical and professional conduct; and
    - Maintain continued professional development.

II. E. COUNSELING

The college shall provide academic advising and career counseling for prospective and enrolled students. In the event an enrolled student needs counseling, this can be provided by the program director and/or COLUMBIA STATE COMMUNITY COLLEGE MLT part time faculty may be involved with student counseling. Clinical affiliate personnel designated as bench instructors at clinical sites occasionally may need to counsel students during clinical Practicum on matters pertaining to professionalism and performance. Counseling can be provided for students on a variety of matters which consist of simple details such as scheduling to more difficult matters such as poor performance in the academic or clinical setting. If necessary, a Student Counseling Report form should be completed and submitted to the program director. This form will be reviewed by the program director and placed in the student's file. Blank copies of this form will be provided to the clinical site or may be copied from this manual.

COLUMBIA STATE COMMUNITY COLLEGE MLT PROGRAM STUDENT COUNSELING REPORT

Student Name _____ Date_____

Clinical Site _____

Practicum Department(s) _____

Description of unacceptable technical performance:

Description of unacceptable professional attitude or behavior:

Student comments:

Corrective action taken:

I have counseled the student regarding this problem.

Clinical site supervisor/instructor signature: _____

Student Signature: _____

II. F. EDUCATIONAL ENRICHMENT BEYOND DEPARTMENTAL OBJECTIVES

Medical Laboratory Technology students and clinical site personnel engaged in student supervision should not limit the educational experiences to the objectives specific for the particular assigned Practicum laboratory department.

Every attempt is made to expose each student to different sizes of hospital laboratories. Organization of the laboratories will differ immensely as will types of activities, procedures, and instrumentation available.

Students will be exposed to as wide a variety of educational experiences as possible.

Student clinical activities should be in accordance with and in fulfillment of educational objectives. Services to laboratories over and above those needed to achieve the educational goals of the students should not be expected. However, students should not close their eyes to learning experiences which may be available in other areas of the facility's laboratory.

In the case of a slow workload day in the assigned Practicum department, students may observe activities and instrumentation in the rest of the lab (with permission of clinical site staff). These may be learning experiences not available in other lab Practicums.

III. COLUMBIA STATE COMMUNITY COLLEGE MLT STUDENT CONCERNS & RESPONSIBILITIES

III. A. HOSPITAL POLICIES

1. The student will be responsible for complying with the policies of the facility and clinical laboratory department of his/her respective clinical site.

2. Students will not be used to replace paid staff. Students may not take the responsibility or the place of "qualified" staff. However, after demonstrating proficiency, students may be permitted to perform procedures with careful supervision. Some clinical sites may allow, under close supervision, students' test results to be reported out, but these must be co-signed or signed by the supervising clinical site instructor. Students are not employees and are to be placed into academic areas according to the program/course guidelines.

3. Students may be employed in the clinical facility outside regular education hours provided the work does not interfere with regular academic responsibilities. The work must be non-compulsory, paid, supervised on-site, and subject to employee regulations. No student, unless an employee of the clinical facility, should return to the assigned clinical Practicum site for any reason without the consent of the clinical Practicum instructor or laboratory supervisor.

4. Hospital non-pay telephones may be used only for emergencies and only when the student receives permission from the clinical site instructor or lab supervisor.

5. Students will apply college absenteeism and tardiness policies to clinical Practicums. If a student will be late or absent, he/she must call the lab supervisor or clinical site instructor as soon as possible. Lost time must be made up at the convenience of the laboratory. (See Section II B. Attendance/Absences.)

6. Students will adhere to lunch and break schedules of the facility. Students must be granted at least 30 minutes for lunch and 15 minutes for breaks. Students who abuse lunch and break allotments will be subject to disciplinary measures.

7. Students will comply with clinical institutions' smoking/tobacco policies.

8. Students will comply with clinical site parking and safety policies and procedures.

9. Students will treat hospital equipment with care and respect according to facility policies and procedures.

III. B. VENIPUNCTURE

COLUMBIA STATE COMMUNITY COLLEGE MLT students receive extensive lectures and training on venipuncture using the artificial training arm and capillary puncture during the first two semesters of the program. Actual capillary puncture and venipuncture are performed upon student volunteers. Venipuncture's can start at the first MLT Clinical Practicum I.

Venipuncture is included as part of each Practicum to allow students to develop phlebotomy techniques and continue practicing. COLUMBIA STATE COMMUNITY COLLEGE MLT students should not be used as a replacement for phlebotomy staff in the clinical site. Once entry-level competency is achieved, regular phlebotomy performed by the student should not interfere with competency development in the assigned Practicum area.

Venipuncture upon patients in the clinical site must always be supervised by the clinical site instructor or qualified phlebotomist with patients being informed of the "student" status.

COLUMBIA STATE COMMUNITY COLLEGE MLT students will not be permitted to perform arterial sticks for blood gases or any other purpose. If clinical site personnel perform arterial sticks, students may only observe.

III. C. SERVICE WORK PERFORMED BY STUDENTS

According to NAACLS Standards, "students shall not take the responsibility or the place of qualified staff. However, after demonstrating proficiency, students, with qualified supervision may be permitted to perform procedures. Service work by students in the clinical setting outside of regular academic hours must be non-compulsory, paid, supervised on site, and subject to employee regulations."

Assurance that this policy is followed is accomplished through communication between the program director and the students at the clinical sites through private discussion while visiting the facilities. Students are able to relay this to the program director through phone calls, visits, or written clinical site evaluations and written assignments turned in to the program director while completing the clinical Practicum.

III. D. COLUMBIA STATE COMMUNITY COLLEGE MLT DRESS CODE FOR CLASS AND/OR CLINICAL PRACTICUMS

In class, on campus, and at the clinical site, the MLT student's appearance should promote confidence and exhibit professionalism. Observable body piercing (other than ear lobes) is not allowed during clinical Practicums. COLUMBIA STATE COMMUNITY COLLEGE MLT students should be dressed and groomed in a professional manner at all times while in attendance at the campus and at clinical sites.

Clothing worn by students at the clinical site should be tastefully fitted--not too tight or too loose. All clothing should be clean, free of wrinkles, and in good condition.

Students at a clinical site are advised to wear comfortable shoes, either athletic, white leather, or vinyl. Shoes should be clean and polished. No open-toed shoes, high heeled shoes, boots, or sandals are allowed. Regular hosiery or white socks are required.

When assigned to a specific clinical site, the student will dress according to standards and practices of the clinical institution.

Personal Protective Attire

COLUMBIA STATE COMMUNITY COLLEGE MLT students shall abide by any precautions set forth by the clinical site laboratories regarding the wearing and laundering of reusable lab coats; and the wearing and disposal of disposable lab coats, gown, gloves, etc. Personal protective equipment and attire (lab coats, gowns, gloves, face shield, etc.) necessary when performing clinical laboratory testing, procedures, or phlebotomy will be provided by the clinical site.

Lab Coats

Purchase of lab coats by COLUMBIA STATE COMMUNITY COLLEGE MLT students is optional. Students may desire to have their own (white) laboratory coat for wear when not performing clinical lab tests, procedures, or phlebotomy.

Picture Identification Name Tag:

Picture ID tags will be provided by COLUMBIA STATE COMMUNITY COLLEGE for each student. Name tags must be worn at all times while attending the clinical sites. Students who do not wear name tags will be sent home.

General Rules of Good Grooming

General rules of good grooming and appearance should be followed:

- Good hygiene should be maintained and appearance should not be offensive in any way. (Daily bathing and use of deodorant is mandatory.)
- Students should be neat and clean.
- Students should not wear excessive make-up, perfume or cologne.
- Students should not wear excessive jewelry. (No long earrings or necklaces.) No pierced tongues, eyebrows, or lips. (Modest rings, wristwatches, and simple chain necklaces and bracelets are acceptable.)
- Nail polish and artificial nails should not be applied or worn.
- Long hair must be neatly pulled back and controlled.
- No ornate hair accessories or scarves should be worn.
- Appropriate, unnoticeable undergarments should be worn - no bikini styles or colored garments that will show through white clothing.
- Tattoos must be covered up with a lab coat, per hospital dress code.

Failure to follow the Rules of Good Grooming and the COLUMBIA STATE COMMUNITY COLLEGE MLT Program Dress Code may cause clinical site instructors to request the student to return home until these standards are met.

Failure to abide by these guidelines may also influence the clinical site instructor in evaluation of a student's professionalism.

Scrubs may be purchased from local uniform stores, mail order catalogs, or consignment shops.

III. E. CONFIDENTIALITY

COLUMBIA STATE COMMUNITY COLLEGE MLT students have been required to read and sign a "Confidentiality Agreement" and have HIPAA training before beginning clinical Practicums in area hospitals. The statement reads:
"During the course of the clinical Practicum or laboratory activities in Medical Laboratory Technology courses, any information obtained through working with laboratory tests and/or activities, is by law, confidential. Any information obtained during the clinical Practicum or MLT course laboratory activities which pertains to patients, physicians, employees, hospital matters, or fellow MLT students is also considered confidential. Any disclosures of such information to unauthorized individuals will result in immediate dismissal from the MLT Program."

III. F. PROFESSIONAL CONDUCT

Students accepting admission into the COLUMBIA STATE COMMUNITY COLLEGE MLT Program commit themselves to the generally accepted ethics of the health care field and especially those of the clinical laboratory professional. These are discussed throughout the program. Students will conduct themselves professionally following the ASCP Board of Registry Guidelines for Ethical Behavior.

Unethical conduct by a student is cause for failure/dismissal from the COLUMBIA STATE COMMUNITY COLLEGE MLT Program.

Any and all occurrences of alleged misconduct or unethical behavior will be investigated by the COLUMBIA STATE COMMUNITY COLLEGE MLT Program Director. The matter may be referred to the appropriate campus officials for hearing and determination if deemed necessary. This includes profanity, detected drug use, and use or smell of alcohol. **All COLUMBIA STATE COMMUNITY COLLEGE rules of behavior are in effect for classroom as well as clinical experiences.**

COLUMBIA STATE COMMUNITY COLLEGE MLT students are expected to complete assigned work independently unless instructed differently. Sharing exams, assignments, papers, and involvement in cheating is considered to be unethical behavior is grounds for discipline or immediate dismissal.

III. G. ASCP & BOARD OF REGISTRY GUIDELINES FOR ETHICAL BEHAVIOR

All clinical laboratory professionals certified by the ASCP agree to uphold this pledge:

"Recognizing that my integrity and that of my profession must be pledged to the best possible care of patients based on the reliability of my work, I will:

Treat my patients and colleagues with respect, care, and thoughtfulness.
Perform my duties in an accurate, precise, timely, and responsible manner.
Safeguard patient information as confidential, within the limits of the law.
Prudently use laboratory resources.
Advocate the delivery of quality laboratory services in a cost-effective manner.
Work within the boundaries of laws and regulations and strive to disclose illegal or improper behavior to the appropriate authorities.
Continue to study, apply, and advance medical laboratory knowledge and skills and share such with my colleagues, other members of the healthcare community, and the public.

I agree to abide by the guidelines for ethical behavior as stated above."

III. H. STUDENT RESPONSIBILITIES

The COLUMBIA STATE COMMUNITY COLLEGE MLT student will be responsible for:

a. His/her liability both to him/herself, occupants of his/her vehicle and to others in his/her transportation to and from the clinical site.
b. His/her personal conduct at the college, the clinical site and transportation to these institutions.
c. His/her academic achievement and skill achievement in all education situations whether in the classroom or in the clinical site.
d. His/her own health insurance prior to attending clinical sites.

III. I. ASSIGNMENTS

1. Practicums Packets

During each clinical Practicum, the student will be required to work on materials included in packets that will be handed out during Clinical Orientation in the first semester and the last day of classes in the second semester. These packets will contain questions for the student to complete as well as case studies and responses to observations made while on clinical Practicum in areas of multi-tasking, quality control, and lab operations. The packets will count 10% of the clinical Practicum course grade and submission of the contents is required in order to complete the course.

The packets will be due at completion of the second Practicum. **Do not mail the packets** to the MLT Program Director. The student should bring in the finished packet directly to the MLT Program Director or they can fax/scan them. All course work must be completed for the student to either continue on the following semester or to graduate, depending on the

semester involved.

Practicum Packets contain exercises that will:

a. Demonstrate critical thinking and problem solving skills.

b. Show correlation of observed abnormal test results to clinical significance as learned in the MLT theory courses. (Ex. - When abnormal results are observed, discuss what disease, condition, or metabolic disorder could be the cause. Discuss what further laboratory tests could be used to confirm the cause.)

c. Discuss observed "out of range quality control values or observed quality assurance problem areas. (Discuss action taken or action that should have been taken. Discuss probable or possible causes of problem. Discuss how problem was resolved or how it should have been resolved.) Act as trouble shooter, inspector, or detective.

d. Discuss staff interaction, lab operation, team work approach, and machine maintenance.

e. Discuss a specific problems experienced at the clinical site (with multi-tasking).

2. Study Guides Available:

BOR ASCP Study Guide
Clinical Laboatory 6 th Edition
ISBN 978-0-8918-9660-9

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Evaluation of Clinical Sites by Students

Each student is asked to complete an evaluation of each clinical site after finishing Clinical Practicum I and II and Practicum III and IV. Submit these evaluations to the program director. These will be reviewed by the program director in order to keep abreast of activities and possible problems existing at the clinical sites.

COLUMBIA STATE COMMUNITY COLLEGE MLT PROGRAM EVALUATION OF CLINICAL SITE BY STUDENT

Clinical Site: _____

Practicum/Discipline: _____

Student: This evaluation is confidential. Results are compiled and reviewed by the program director. Resulting statistics are shared with clinical site supervisors. Every attempt is made to preserve student anonymity. Completion of this evaluation is not mandatory, but it will assist in continued program improvement.

Circle one score for each item. Write NA if the item is not applicable.
Using a scale of 1 - 5, rate each of the following items.
(1=Never, 2=Rarely, 3=Sometimes, 4=Often, 5=Always)

1.	Personnel of department presented a positive, respectful attitude toward the student.	1 2 3 4 5
2.	Instructor presented relevant information and instruction in a clear manner.	1 2 3 4 5
3.	Instructor encouraged questions, comments, & discussion.	1 2 3 4 5
4.	Instructor & department personnel provided adequate supervision to the student while performing tasks.	1 2 3 4 5
5.	Instructor was competent & knowledgeable in area of instruction.	1 2 3 4 5
6.	Instructor gave continued feedback of student performance throughout sub - Practicum.	1 2 3 4 5
7.	Instructor completed & discussed student evaluation in a timely manner.	1 2 3 4 5
8.	Student felt adequate time was spent performing tasks and clinical tests.	1 2 3 4 5

9.	Student felt adequate time was devoted to their education.	1 2 3 4 5
10.	Department policies & procedures were clearly presented to the student.	1 2 3 4 5
11.	Instructor provided assistance with &/or reviewed study question answers.	1 2 3 4 5
12.	Instructor supplemented training with study aids (slides, unknowns, lectures, etc.).	1 2 3 4 5
13.	Student developed confidence in skills learned in this sub - Practicum.	1 2 3 4 5
14.	Student felt valued as a member of the department.	1 2 3 4 5
15.	Student felt site should continue to be used for this sub - Practicum.	1 2 3 4 5

List strengths of this Practicum or clinical site.

List weaknesses of this Practicum or clinical site.

Comment on your academic preparation for this Practicum.

Additional comments.

III. J. TRAINING CONCERNING BLOOD BORNE PATHOGENS & TB STANDARDS

Laboratory safety is taught in each COLUMBIA STATE COMMUNITY COLLEGE MLT course. All students read and sign acknowledgment sheets for Laboratory Safety Precautions.

Particular attention is paid to Universal Precautions and the Blood Borne Pathogens Standard. In the Introduction to the Clinical Laboratory course, students receive lectures, observe the DVD's and/or LAB CE pertaining to -- "Laboratory Safety and Infection Control" and "OSHA's Blood Borne Pathogens Standard", and have the opportunity to ask questions about these topics. Students sign a Blood Borne Pathogens Standard form verifying training.

III. K. COLUMBIA STATE COMMUNITY COLLEGE MLT STUDENT SUBSTANCE/ALCOHOL ABUSE: CLINICAL-CLASSROOM

Introduction

The Columbia State Community College MLT Program is committed to sponsoring safe, healthy, lawful, productive health program. Pursuant to that commitment, COLUMBIA STATE COMMUNITY COLLEGE MLT Program has adopted the following Substance Abuse Policy. This policy applies to all students enrolled in or applying to the COLUMBIA STATE COMMUNITY COLLEGE MLT program.

Substance Abuse/Misuse at a Clinical

The following actions/conditions are prohibited:

Deficient clinical performance due to use of drugs and/or alcohol

Reporting for a clinical session with the odor of alcohol or illegal chemicals on the breath

Possessing any illegal narcotic, hallucinogen, stimulant, sedative or similar drug while on clinical time

The student should refrain from using any intoxicating liquor or illegal substances within 24 hours prior to or while on clinical time, on the premises or away from the premises when required to return to the clinical facility.

Removing any drug from the institution or patient supply for any reason

During Clinical, students are subject to all clinical facility policies regarding random and/or "for cause" drug/alcohol testing.

All students have a responsibility to notify their instructor(s) if they are taking any medications which may impact student's ability to provide safe, competent care. The purpose of this policy is to protect the welfare of clients, students, instructors, COLUMBIA STATE COMMUNITY COLLEGE and affiliate agencies.

All questionable student behavior will be dealt with through the following procedure:

If clinical performance in the judgment of the clinical instructor could be or is adversely affected by a prescribed medication, the student will be sent home and considered ill for make-up purposes.

Should an incident or an occasion in clinical occur when the instructor or staff has a reasonable suspicion of use or being under the influence, the student may choose to submit immediately to a substance abuse assessment and urinalysis.

Testing Results

The results of the testing shall be disclosed to the student and to the MLT Program Director. After this disclosure is made, the Program Director shall arrange a conference with the student to discuss the test results. Students may not resume in the program without first attending this conference. Students who test positive for drugs and/or alcohol can be dismissed from the program. Student who test negative for drugs and/or alcohol may resume participation in class. Students who promptly provide an adequate legitimate medical explanation to the clinical site for any drugs and/or alcohol in the serum or urine sample may also resume participation in classes.

IV. EVALUATION OF STUDENT

IV.A. CLINICAL PRACTICUM GRADING CRITERIA

Toward the end of each practicum, the student will be evaluated by the clinical site instructor. The evaluation should be reviewed by the instructor and the student, then signed by both and returned to the program director. At mid - Practicum, instructors and students should informally evaluate student progress and performance. If a problem exists, at any time, the program director should be notified. A COLUMBIA STATE COMMUNITY COLLEGE MLT Program Counseling Form may be used for this purpose.

The formal evaluation done by the clinical site instructor should be based on observation of the student's performance and discussion of understanding of the lab procedures.

Clinical site instructors may choose to give students unknown specimens or question students in writing or orally to aid in instruction and evaluation.

Ten percent (10%) of each practicum grade is based on the packet submitted to the program director. These packets are due the date stated on the clinical assignment sheet. Packets not received by these due dates will be assigned a grade of zero points. Details about the packet assignment may be found in the COLUMBIA STATE COMMUNITY COLLEGE MLT

Clinical Practicum Manual.

Individual Clinical Practicum Task List and Professional Skills Evaluation scores will be assigned by the clinical site instructor near the end of each Practicum, reviewed by the instructor and student together, signed, and given to the COLUMBIA STATE COMMUNITY COLLEGE MLT Program Director once the student has completed all assigned days of the clinical Practicum.

Clinical sites will receive a copy of the Clinical Practicum Grade form for each student's Practicum attended at their site.

The grading criteria for each Practicum will consist of scores from the following:

Practicum I, II, III, IV

Practicum Skill List Score	50%
Professional Skills Evaluation Score	40%
Clinical Packet Score	10%

IV. B. COLUMBIA STATE COMMUNITY COLLEGE MLT CLINICAL PROGRAM GRADING SCALE

A	92 - 100%
B	83 - 91
C	77- 82
Below 77 is Failing	
D	70 - 76
F	69 & BELOW

COLUMBIA STATE COMMUNITY COLLEGE MLT PROGRAM RETENTION POLICY

Retention in the COLUMBIA STATE COMMUNITY COLLEGE MLT Program based on Course Grades

Retention in the COLUMBIA STATE COMMUNITY COLLEGE MLT Program requires that the MLT student earn a grade of "C" or better in all MLT and natural science courses (Microbiology, Anatomy & Physiology). Grades of "D", or "F" are considered failing. The student must maintain a "C" average in all courses required in the MLT curriculum.

If a student earns less than a “C” in an MLT or required natural science course, the course must be repeated with a passing grade ("A", "B", or "C"). MLT courses are only offered once

a year, so the student will have to wait to take courses until the pre-requisite course has been completed with a passing grade. All courses must be taken in sequence as specified by course pre-requisites unless permission is granted by the program director.

"C" Average = 2.0 on a 4 pt. scale

MLT student grades will be reviewed by the MLT Program Director at the end of each semester.

A student who earns less than a “C” in an MLT or BIOL class will be academically unable to continue in the program. The student may request, in writing to the program director, a request for readmission the following year at the point of exit. Readmission is partially based upon space available in the subsequent cohort and is not guaranteed.

IV. C. PRACTICUM TASK LIST

The clinical site instructor follows the Practicum Task List for completion of technical tasks. The Practicum Task Lists are general outlines of tasks that the student should have the opportunity to complete or observe during the clinical Practicums. Clinical sites vary in the ability to offer the same opportunities, so additional blanks at the end of the Practicum Task List may be used to list unique tasks. If a clinical site does not perform a particular test/task, that task should be marked NA (Not Applicable). Task evaluations should be based on terminal performance (not upon initial and early task performance).

Evaluation of technical tasks should utilize the following criteria:

Score
1 = F = Error, unacceptable Performance. The student performs the task with inconsistent technical skills and does not follow clinical site policies while performing tasks. The student has consistent performance errors appearing to make no attempt to improve performance or both.

2 = D = Unacceptable Performance. The student performs the task with consistent technical skills. The student needs direct, constant supervision and instruction when performing task.

3 = C = Acceptable Performance (Average). The student performs skills with average technical skills, requiring moderate supervision and appears to understand the basic understanding of the procedures or assays.

4 = B = Good Performance (Above Average). The student performs the task with good technical skill with minimal supervision and demonstrates a basic understanding of the procedures or assays.

5 = A = Superior Performance (Excellent). The student performs the task demonstrating superior technical skill with minimal supervision and demonstrates a thorough understanding

of the principle and its application.

The clinical site instructor should complete the scores for individual tasks. Further calculations will be done by the program director.

A Task List Average Score is determined by dividing the Total Number of Task Evaluation Points earned by the Total Number of Tasks Performed.

$$\text{Task List Average Score} = \frac{\text{Total Number of Task Evaluation Points}}{\text{Total Number of Tasks Performed}}$$

The Task List Average Score (somewhere between 1 & 5) is applied to Clinical Site Evaluator's Scale, and a letter grade is determined.

The maximum number of points for that particular letter grade is awarded according to the MLT Program Grading Scale (out of a possible 100).

Those points are then multiplied by the weighted percentage for that evaluation method (0.50) and this value is combined with scores for the other two evaluation components and totaled to give the Practicum Grade.

For example, a student who performs 24 tasks, earns twelve 3's, nine 4's, and four 5's -- receives a Total Number of Task Evaluation Points of 92. This is multiplied by .50 giving 46 points to this section of the evaluation.

The Task List Average Score is then applied to the Clinical Site Evaluator's Scale to assign 46 points.

IV. D. Professional Skills Evaluation

The student shall be evaluated based on observed terminal behaviors (seen at the end of the Practicum). Instructors may also comment on student strengths and weaknesses. Students may also comment.

The clinical site instructor should evaluate the student using the following criteria:

1 = F = Student has difficulty grasping important functions and tasks in the laboratory. Consistently performs with errors, demonstrates an unacceptable attitude, or both.

2 = D = Student functions inconsistently in the laboratory, with constant and detailed instruction required to achieve acceptable performance.

3 = C = Student demonstrates acceptable performance with supervision. Requires assistance with evaluation of situations and solutions.

4 = B = Student demonstrates good performance, is careful, and demonstrates adequate attention to detail. Requires minimal supervision.

5 = A = Student demonstrates superior performance with an above - average level of skill. Rarely requires assistance with evaluation of situations and solutions.

The clinical site instructor should indicate a score for each item.
Further calculations will be done by the program director.

Each point column of the Professional Skills Evaluation are totaled and added together to obtain a Total Point Value (TPV) of a possible 80 points. This score is then multiplied by .40 and the points added to the overall clinical score.

If the student receives 60 points, multiplied by .4, then they receive 24 points. So far, if we add the 46 points already received, plus the 24 points above, the student currently has 70 points.

Packet Evaluation

The packet assignment will be reviewed and graded by the Program Director and given a score from 0 to 200 points. The total points earned for the packet is 20 points.

If the student receives 180 points and this is multiplied by .010, the student receives 18 points.

Thus, if you add up the points of the student, 46, 24, and 18, the student has a total of 88 points and receives a “B” according to the grading scale.

Student’s Clinical Final Grade

Practicum Task List = 100 points (0.50)
Professional Skills = 80 points (0.40)
Packet Questions = 20 points (0.10)

COLUMBIA STATE COMMUNITY COLLEGE MLT PROFESSIONAL SKILLS EVALUATION FORM

Student Name: _____

Clinical Site _____

NOTE: There are several skills listed under each heading. Please give a score for EACH skill.	(F) 1	(D) 2	(C) 3	(B) 4	(A) 5
Initiative Performs routine assigned tasks Seeks unsolicited tasks					
Interest Asks relevant questions Is alert and attentive					
Responsibility - Completes required assignments Completes study questions					
Reaction to Criticism - Accepts constructive criticism Uses criticism for improvement					
Interpersonal Relationships - Works as a team member Functions well in educational setting Helps others willingly/Communication					
Professional Performance - Maintains work quality & quantity under stress Maintains professional composure Organizes tasks and workload Follows specific COLUMBIA STATE COMMUNITY COLLEGE dress code					
Integrity- Admits to errors or mistakes Follows procedures without shortcuts Shows consistent attention to detail Monitors QC procedures					
Cleanliness & Orderliness- Leaves working area clean and neat Replenishes supplies and reagents					
Promptness- Arrives on time Begins work promptly					
Confidence- Displays confidence after instruction Recognizes limitations					
Miscellaneous- Maintains accurate records Demonstrates good laboratory technique Uses recommended safety precautions Identifies inconsistent results					
TOTAL POINT VALUE _____ =					

Signature of Supervisor: _____
Date: _____

Comments:

Clinical site instructors: Please rate student according to observed, terminal behaviors. Mark an X in one score for each item using the following criteria.

1 = F = Student has difficulty grasping important functions and tasks in the laboratory. Consistently performs with errors, demonstrates an unacceptable attitude, or both.

2 = D = Student functions inconsistently in the laboratory, with constant and detailed instruction required to achieve acceptable performance.

3 = C = Student demonstrates acceptable performance with supervision. Requires assistance with evaluation of situations and solutions.

4 = B = Student demonstrates good performance, is careful, and demonstrates adequate attention to detail. Requires minimal supervision.

5 = A = Student demonstrates superior performance with an above - average level of skill. Rarely requires assistance with evaluation of situations and solutions.

Clinical Site Instructor's Comments on Student Strengths:

Clinical Site Instructor's Comments on Student Weaknesses:

Student's Comments:

Clinical Site Instructor Signature_____ Date _____

Student Signature _____ Date _____

IV.E

COLUMBIA STATE COMMUNITY COLLEGE MLT PROGRAM PRACTICUM GRADE FORM
Practicum I, II, III, IV

Student Name _____

Semester/Year _____

Practicum Dates _____

Clinical Site _____

Assigned Department

Final Task List Score = _____ (0.50)

Professional Skills Evaluation
Score = _____ (0.40)

Clinical Packet Score = _____ (0.10)

Letter Grade _____

Comments:

Program Director _____Date _____

V. RESPONSIBILITIES OF PROGRAM DIRECTOR/OFFICIALS

A. Assignment of MLT students to clinical sites and notifications of clinical sites of Practicum assignments.

B. Receiving student evaluations and attendance records from clinical sites.

C. Assignment of grades to students for clinical sites by use of evaluation and attendance records from clinical site instructors.

D. Keeping communications open with clinical sites and students.

E. Visiting each clinical site at least once during each Practicum.

VI. RESPONSIBILITIES OF CLINICAL SITE SUPERVISORS/COORDINATORS

A. Ensuring proper instruction and Practicum of the MLT student.

B. Ensuring that student evaluations are completed upon students' completion of assigned clinical Practicum days.

C. Returning clinical site Facility Fact sheets, Faculty Fact sheets, and other necessary documentation to program director.

D. Keeping communications open between the clinical site and the program director.

VII. Practicum III

VII.A. IMMUNOHEMATOLOGY

VII.A.1 Departmental Objectives

Upon completion of the Clinical Practicum in the Blood Bank department, the student should be able to accomplish the following:

1. Perform daily quality control practices and record QC for:
   - refrigerators
   - incubators
   - reagents and cells

2. Check blood units for contamination and dating period discarding expired and contaminated units.

3. Perform blood inventory, ordering, and log-in of units received.

4. Obtain and prepare all needed reagents and supplies.

5. Retype blood units.

6. Accurately perform ABO and Rh grouping (forward and reverse).

7. Accurately perform weak D (Du) typing (if done).

8. Accurately perform compatibility cross match.

9. Accurately perform antibody screens.

10. Accurately identify antibodies (if done).

11. Know how to select, cross-match, and process units of blood for a patient with an antibody.

12. Prepare donor blood for issue.

13. Issue blood and components to proper person and complete proper paperwork correctly.

14. Handle, store and log units of returned blood (used and unused) properly.

15. Perform follow-up for incompatible cross-match.

16. Perform direct anti-globulin test.

17. Perform indirect anti-globulin test.

18. Perform pre-natal work up.

19. Perform post-natal work up.
20. Prepare Rh Immune Globulin for a patient (if done).
21. Verify all abnormal, unusual, or incompatible results.
22. Prioritize work in the blood bank.
23. Neatly, correctly, and completely record all test results and information in proper places.
24. Perform all tests using proper laboratory techniques.
25. Perform routine maintenance on blood bank equipment.
26. Perform fetal screens.
27. Apply clinical phlebotomy theory.
28. Learn & practice phlebotomy skills with organization, precision, and technique.
29. Recognize safety & precaution signs and labels.
30. Keep accurate QC records, and follows QC standards.
31. Locate safety equipment.
32. Disinfect work area.
33. Follow facility's safety policies.

MLT Evaluation Sheet
Blood Bank Checklist

	5	4	3	2	1	
	Exceeds	Good	Average	Poor	Unacceptable	NA
Is prepared for Tasks						
Has applicable Knowledge						
Performs QC						
Checks Inventory						
Checks Temps						
Knows Specimen Requirements						
Processes New Inventory						
Knows Reagents						
Types Blood						
Antibody Screens						
Crossmatches						
Antibody ID						
Understands issuing Blood						
Daily Maintenance						
Work Flow						
DAT						
RHIG						
Fetal Screen						
Keeps Accurate Records						
Critical Thinking						
Troubleshooting						
Platelets						
FFP						
Antigen types units						
Cord Blood						
Emergency Release/Massive						
Startup/Shutdown						
Transfusion Reaction						
Other:						

Signature of Supervising Tech: _____

VII.B. HEMATOLOGY/COAGULATION

VII.B.1. Departmental Objectives

Upon completion of the Clinical Practicum in the Hematology/Coagulation department, the student should be able to accomplish the following:

1. Discuss how QC is monitored for the different procedures and instrumentation in the hematology & coagulation departments, how QC records are evaluated, and proper corrective actions to be taken if QC values are outside established limits.

2. Evaluate histograms and predict cause of abnormal histograms.

3. Discuss the principle of operation of instruments used in these departments and utilize these instruments to obtain specimen results which are within acceptable limits.

4. Obtain and prepare all necessary reagents and supplies.

5. Perform start-up, shut-down, maintenance, and QC on the instruments.

6. Perform manual RBC, WBC, platelet counts, hemoglobin and hematocrit determinations (if done).

7. Calculate erythrocyte indices.

8. Prepare, stain, and count reticulocyte smears.

9. Prepare and stain peripheral blood smears and perform differential counts manually.

10. Estimate platelets and note erythrocyte morphology on stained blood smears.

11. Perform testing for Hgb S and ESR's (if done).

12. After examining test results for acceptable ranges, note abnormal test results, and correlate with disease processes.

13. Verify and correct all abnormal or unusual results.

14. Be aware of panic values for each test performed and know procedure to follow when panic values are obtained.

15. Separate plasma from cells within required time restraints.

16. Perform, log, and report out results for the following coagulation tests:
PT, APTT, Bleeding Time, Thrombin Time, Fibrinogen, Fibrinogen degradation products (if done).

17. Discuss why tests are repeated to obtain reproducible results and why rapid reporting of results is critical.

18. Discuss the principles and purpose of the PT and APTT tests.

19. Apply clinical phlebotomy theory.
20. Learn & practice phlebotomy skills with organization, precision, and technique.
21. Recognize safety & precaution signs and labels.
22. Keeps accurate QC records and follows QC standards.
23. Locate safety equipment.
24. Disinfect work area.
25. Follow facility's safety policies.

Hematology/Coag Checklist

Student's Name _____

	5 (A) Exceeds	4(B) Good	3(C) Average	2(D) Poor	1(F) Unacceptable	NA
Is prepared for Tasks						
Has applicable Knowledge						
Performs QC						
Checks Inventory						
Checks Temps						
Knows Specimen Required						
Processes New Inventory						
Knows Reagents						
Runs CBC's						
Understands Histograms						
Understands RBC Indices						
Manual Diff's						
WBC Morphology						
Daily Maintenance						
Work Flow						
RBC Morphology						
PT/PTT						
ESR						
Startup/Shutdown						
Critical Thinking						
Troubleshooting						
Retics						
Urinalysis						
HCG's						
Miscellaneous						
Body Fluids						
Other:						

Signature of Supervising Tech: _____

Student Signature: _____

VII. C. MICROBIOLOGY/SEROLOGY

VII. C. 1. Departmental Objectives

Upon completion of the Clinical Practicum in the Microbiology/Serology departments, the student should be able to accomplish the following:

1. Explain the principles of operation of instrumentation and manual methods used in the department. Utilize instrumentation to obtain culture results, counts, identification, and susceptibility testing.

2. Obtain and prepare all necessary reagents, media, and supplies.

3. Understand start-up, shut-down, and maintenance of instruments.

4. Discuss methods of monitoring QC of manual procedures and instrumentation in the department including QC data evaluation and corrective action taken when necessary.

5. Select proper media and inoculate correctly for each specimen type.

6. Differentiate potential pathogen colony characteristics vs. normal flora to enable colony selection.

7. Choose and perform tests required to identify potential pathogens.

8. Interpret tasks used to identify potential pathogens.

9. Perform anti-microbial susceptibility testing on isolates.

10. Perform bacterial serotyping (if done).

11. Report out culture results.

12. Perform and interpret Gram stains, AFB stains (if done), wet mounts and other stains performed in the microbiology department.

13. Perform blood cultures correctly - inoculation, incubating, reading and sub-culturing in specified manner.

14. Process TB cultures (if done).

15. Process mycology cultures (if done).

16. Process specimens for parasitology exams (if done) and identify parasites found.

17. Discuss the principle and methods used in serology testing techniques.

18. Show correct technique, interpretation, and reporting of results for all serology techniques performed in the department (e.g. agglutination, precipitation, flocculation, EIC, RIA,

ELISA, nephelometry, immunofluorescence, enzyme inhibition - if done).

19. After performing tests, note abnormal test results and correlate them with disease processes.

20. Discuss the principle and methods used in serology testing techniques.

21. Apply clinical phlebotomy theory.

22. Learn and practice phlebotomy skills with organization, precision, and good technique.

23. Recognize safety and precaution signs and labels.

24. Follow facilities safety policies.

25. Locate safety equipment.

26. Disinfect work area.

27. Keep accurate QC records and follows QC standards.

28. Identify critical results.

Microbiology Checklist

Student's Name _____

	5 Exceeds	4 Good	3 Average	2 Poor	1 Unacceptable	NA
Is prepared for Tasks						
Has applicable Knowledge						
Performs gram stains						
Other stains:						
Selects Proper Media						
Knows Specimen Required						
Sets up Plates						
Streaking Technique						
Reads Plates						
Identifies Bacteria						
Sets up ID and Sensitivity						
Blood Cultures						
Micro QC						
Daily Maintenance						
Work Flow						
Operation of Instruments						
Other:						
Critical Thinking						
Troubleshooting						
Special Procedures						
Molecular						
Miscellaneous						
Occult Bloods						
Rapid Tests						

Signature of Supervising Tech: _____

Student Signature: _____

Please write additional comments on back.

VII.D CLINICAL CHEMISTRY

VII.D.1 Department Objectives

Upon completion of the Clinical Practicum in the Clinical Chemistry departments, the student should be able to accomplish the following:

1. Explain the principle of operation of instrumentation and manual methods used in the departments. Utilize instrumentation to obtain accurate specimen results.

2. Identify and determine suitability of patient specimens.

3. Obtain and prepare all necessary reagents and supplies.

4. Discuss methods of monitoring QC of manual procedures and instrumentation in the departments including QC data evaluation and corrective action taken when necessary.

5. Follow prescribed procedures to operate instrumentation to obtain acceptable patient results.

6. Understand start-up, shut-down, and maintenance of instruments.

7. Perform necessary calculations using instrument printout results to obtain reportable patient results and report these accurately.

8. Examine results for acceptability, verify and repeat as indicated.

9. Be aware of panic values for tests performed and know protocol for when panic values are obtained.

10. Discuss chemical principle behind basic chemistry and urinalysis procedures and the clinical significance of results for tests for chemical constituents.

11. Discuss clinical significance of performing profiles to monitor liver function, renal function, cardiac status, iron studies, fetal maturity monitoring, endocrine studies, diabetic monitoring, etc.

12. Perform all aspects of a routine urinalysis: physical and chemical characteristics (manually and/or automated) and microscopic examination of urinary sediment. Interpret and report results.

13. Perform occult blood tests on feces specimens.

14. Perform pregnancy testing.

15. Perform miscellaneous tests.

16. Apply clinical phlebotomy theory.

17. Learn and practice phlebotomy skills with organization, precision, and good technique.

18. Recognize safety and precaution signs and labels.
19. Follow facility's safety policies.
20. Locate safety equipment.
21. Disinfect work area.

MLT Evalution Sheet
Chemistry Checklist

Student's Name _____

	5	4	3	2	1	
	Exceeds	Good	Average	Poor	Unacceptable	NA
Is Prepared for Tasks						
Has Applicable Knowledge						
Daily Startup						
Run QC						
Run Calibrations						
Daily maintenance						
Understands ISE						
Loads Reagents						
Sample Processing						
Manual Dilutions						
Drug Screens						
Aware of Delta Checks						
Recognizes/calls Panics						
Timed Specimens						
Work Flow						
24 Hr Urines						
Operation of Instruments						
Specimen Req for Tests						
Critical Thinking						
Troubleshooting						
Special Chemistries						
Miscellaneous						

Supervising Tech Signature: _____

Student Signature: _____

Mini Chemistry Rotation Checklist

Students Name_____

	5(A) Exceeds	4(B) Good	3(C) Average	2(D) Poor	1(F) Unacceptable	NA
Sample accessing						
Understands concepts of Patient Identifiers						
Demonstrates knowledge of acceptable and unacceptable samples						
Chain of Custody Forms						
Special Handling and Delivery Requirements						
Grossing						
Describing						
Measuring						
Inking						
Sectioning						
Testing Methods						
I**mmunohistochemistry**						
Tissue Preparation						
Antigen Retrieval						
Block Background						
Detect Target						
Visualize sample						

Supervising Tech Signature _____
Student Signature _____

VIII. A. EXPOSURE TO INFECTIOUS MATERIALS

COLUMBIA STATE COMMUNITY COLLEGE MLT Needle stick/Splash Exposure Policy/Procedure

In the event of a splash of blood or potentially infectious material to mucous membranes, needle stick or injury with contaminated needles or sharps, the exposed area should immediately be washed with warm water and disinfectant soap.

If the exposed area was in the mouth, rinse with water or mouthwash.

If the exposure was in the eyes, flush with warm water (or normal saline, if available). Irrigate the area completely with water. On campus/in labs, eyewash bottles are kept in the COLUMBIA STATE COMMUNITY COLLEGE MLT storage cabinets in the Columbia State Community College laboratory.

Next immediately report the incident to the instructor.

The student and instructor should complete an incident/exposure report form. The incident report form should state how, where, and when the incident occurred. If known, the source of the infectious material should be noted.

Blank incident forms are kept in the MLT Program Directors office.

One copy of the incident form will be given to the student, one sent to the Dean's office, and the original retained by the MLT Program Director.

The MLT Program Director must be notified immediately of an exposure incident and will counsel the student from an advisory standpoint.

The student will be counseled and advised to seek health care from a provider of choice for follow up care and testing. Expense of testing and any resulting medical care will be the responsibility of the exposed student.

VIII.B

Columbia State Community College
Medical Laboratory Technology Program

Incident/Exposure Form

Students Name: _____

Student ID # _____

Address _____

_____

Phone _____

Location of exposure _____

Date/time of exposure _____

Explain how the incident occurred.

What immediate care was given to the student?

Signature of Student _____ Date _____

Signature of Instructor _____ Date _____

The student was counseled about recommended testing and follow up by the MLT Program Director.

_____
Signature of MLT Program Director

COLUMBIA STATE COMMUNITY COLLEGE MLT CLINICAL PRACTICUM STUDENT AGREEMENT

After reviewing the contents of the COLUMBIA STATE COMMUNITY COLLEGE MLT Program Clinical Practicum Manual, this page should be removed by the student, signed, and returned to the COLUMBIA STATE COMMUNITY COLLEGE MLT Program Director.

I have read the contents of the COLUMBIA STATE COMMUNITY COLLEGE MLT Program Clinical Practicum Manual. Policies and expectations have been explained and I have been provided with the opportunity to ask questions and receive additional explanation. I understand the objectives I must meet, the competencies I am to attain, and the obligations I have to myself, the COLUMBIA STATE COMMUNITY COLLEGE MLT Program, the college, and any clinical sites where I may be assigned.

Printed Name _____

Signature _____

Date _____

COLUMBIA STATE COMMUNITY COLLEGE MLT Clinical Checklist

Initial each of the following

_____ Following instructions by academic and clinical instructors
_____ Must have better than an average evaluation for each specific clinical Practicum
_____ Must not be absent more than 1 time for a Practicum-results in dismissal
_____ Must not be tardy more than 1 time for a Practicum-results in dismissal
_____ Speak respectfully to academic and clinical instructors
_____ Speak kindly and patiently to patients
_____ Refrain from using foul language at all times
_____ Take responsibility for my own actions
_____ Be consistently on time and present for class and Practicums
_____ Keep personal comments and thoughts to myself
_____ Refrain from causing strife and/or discord among the class and clinical sites
_____ Refrain from personal comments and sharing personal problems
_____ Refrain from discussing COLUMBIA STATE COMMUNITY COLLEGE MLT
_____ Refrain from using my cell phone in the classroom and at the clinical site
_____ Observe all safety protocol
_____ Follow a dress code that is appropriate with a professional in the field
_____ Follow appropriate grooming habits with a professional in the field
_____ Follow ASCP/BOC guidelines of Ethical Behavior
_____ Perform duties as assigned in the classroom and clinical site in a professional manner
_____ Refrain from arguing with any instructor, colleague, classmate, or patient
_____ Do not gossip or share any information as in keeping with professional standards

I have read the following and understand the obligation to exhibit appropriate and professional behavior both in the classroom and the clinical site. I further understand and acknowledge that I may be failed/ dismissed from the program if I do not abide by the behaviors listed here and any other that may apply to appropriate professional conduct.

Print Name _____

Sign Name _____

Date: _____

COLUMBIA STATE COMMUNITY COLLEGE MLT PROGRAM STUDENT ABSENCE REPORT

Student Name _____Date_____

Clinical Site _____

Practicum Department(s)_____

Date/Time called in _____Call received by _____

Reason for Absence:

Clinical Site Supervisor/Instructors Signature: _____

Documentation Required Yes _____ No: _____

Planned Makeup Schedule:

Completed Makeup Schedule:

Student Signature _____ Date _____