

Clinical Practicum Handbook

2023-2024

Table of Contents

MLS Information Page	3
Affiliated Clinical Sites	4
Guidelines for Clinical Internships	5
Outcomes	5
Hours	5
Attendance	5
Personal Appearance and Professional Conduct	5
ASCLS Code of Ethics	6
Pledge to the Profession:	6
Confidentiality and HIPAA	7
Accidents and Exposure	7
Communication	7
Background Checks and Drug Testing	7
Severe Weather	7
Safety	7
Immunizations	8
Acceptable Internship Progression	8
Service work	8
Methods of Evaluation	8
Checklist	8
Performance and Professionalism	
Daily Logs and Other Documents	8
Definition of evaluation terms	8
Grading	9
Submissions	9
Student Responsibilities	10
Clinical Supervisor/Preceptor Responsibilities	10
Internship Instructor Responsibilities	10
Competency checkoff lists	11-37
TRAJECSYS INFORMATION	
Trajecsys: Registration	
Trajecsys: Clocking In and Out	
Trajecsys: Daily Logs	
Trajecsys: Weekly Log Journal	
Trajecsys: Automation Report	
Trajecsys: End of Rotation Evaluations	
Instructions for Clinical Preceptors	
SIGNATURE SHEET	

MLS Information Page

MLS Program Director and Clinical Coordinator:

Jeanette Norris MS, MLS(ASCP)^{cm} jnorris@thomasu.edu

Affiliate Faculty:

Dawn Williamson MS, MLS(ASCP) dwilliamson@thomasu.edu

Adjunct Instructor:

Jessica Hoernemann MS, MLS (ASCP)^{CM} jhoernemann@thomasu.edu

Adjunct Instructor:

Phyllis Ingham EdD, MEd, MT (ASCP) Email: pingham@thomasu.edu

Adjunct Instructor.

Rebecca James MS, MLS(ASCP)cm rjames@thomasu.edu

Adjunct Instructor:

Rebecca Stratford, MS, MLS(ASCP)cm rstratford@thomasu.edu

Adjunct Instructor:

Hind Kurbaj, MS, MLS(ASCP)cm hkurbaj@thomasu.edu

Adjunct Instructor:

Georgia Smith MEd, MBA, MLS(ASCP)^{cm} gsmith@thomasu.edu

MLS 2+2 Student Advisor:

Stacie Reilly
Email: sreilly@thomasu.edu Phone: 229-227-6932

MLS Campus Based Student Advisor:

Kendon Warren Email: kwarren@thoamsu.edu Phone: 229-227-6949

MLS Fax Number 229-584-2421

Affiliated Clinical Sites

*This list is not inclusive to all active agreements on file.

Archbold Medical Center and Affiliates

Artesia General Hospital

Atrium Health--Floyd Medical Center

Centrastate Health System

Dodge County Hospital

Emanuel Medical Center

HCA Healthcare—Capital (Tallahassee, FL)

Jefferson Health System

LabCorp

Miller County Medical Center

Northside Hospital System

OneBlood

Piedmont Fayette Hospital

Redmond Regional Medical Center

Quest Diagnostics

Spartanburg Regional Healthcare System

Southeast Health Lab

South Georgia Medical Center

Tift Regional Memorial Hospital

Wellstar Health System

Guidelines for Clinical Internships

Outcomes

During the clinical internship, MLS students will perform assigned tasks under the direction of clinical site preceptors according to their established policies and procedures. Working with a preceptor, students will develop skills in the laboratory by performing patient testing, preparing and maintaining instruments for testing, reviewing lab data and patient results, and reporting accurate results.

Students will demonstrate entry level MLS competency by completing task checklists, posting a daily log summary and other assignments, and completing any testing required by clinical sites.

Students will share their knowledge in weekly discussions of what has been learned at their respective sites as well as answer questions put forth by the clinical course instructor.

Students will demonstrate professional attributes of the Medical Lab Scientist at all times. This behavior will be measured by your preceptor and submitted to the instructor.

Hours

Specific times for arrival and departure will be determined by the clinical site and specific department practicum preceptors. Hours may be assigned during any shift at the preceptor's discretion and approval of the clinical coordinator. The student should note that the time for arrival will vary by clinical site and rotation area. Students will not count their lunch break as part of their clinical time. Breaks provided will follow the normal schedule of the clinical site but a 30-minute lunch break during an 8-hour shift must be taken.

Attendance

Attendance is required for scheduled days and must be recorded in Trajecsys. Students are expected to seek out opportunities to learn, to gain experience, and to assist scientists/technologists when appropriate. Logs should be kept for each day the student is in the practicum with skills recorded in Trajecsys. When all checklists are completed, the student is expected to continue their log and participation in all discussions and assignments throughout the remaining portion of the course.

Personal Appearance and Professional Conduct

The appropriate attire includes:

- Students must wear appropriate uniforms to all clinical assignments.
- Closed-toe, clean, leather or wipeable shoes that cover the heel and prevent chemicals and body fluids from being able to soak through the shoe in the event of exposure.
- Fluid-proof lab coat, which meets OSHA specifications when working in the laboratory (provided by the facility).
- Eye protection must be worn when the potential for splash of infectious materials exists (provided by the facility).
- Nitrile gloves must be worn at all times when handling patient specimens.
- Student ID badge/name tag must be worn at all times.
- Hair should be clean at all times and must be placed up and pulled off the face and the shoulders.
- Hair is a source of cross contamination and must not interfere with the delivery of patient care. Ponytails must be controlled and not drop forward when giving patient care or operating laboratory equipment. Beards, mustaches, and buns should not appear in disarray. They should be clean and neatly groomed.
- Makeup can be worn in moderation.
- Fingernails harbor microorganisms and must be kept reasonably short (ideally less than 1/4 inch past the tip of the finger). No acrylic or gel fingernails are allowed in the clinical area.
- A watch, wedding bands or simple rings, and earrings (not hanging) are permitted. (Note: rings with stones have the potential to make microscopic holes in gloves.) No other jewelry or body ornamentation is permitted. This includes piercings. Additional piercings are NOT allowed.
- Tattoos must be covered if you have tattoos on the arms, neck, or other areas that could potentially be visible, you must wear undergarments (turtleneck, long sleeves etc.) to insure they are not exposed or visibly noted.

- Good personal hygiene is of the utmost importance when working with other people.
- Undergarments may not be visible through scrubs by pattern or design at any time.
- The student must meet any additional regulations of the clinical affiliate that are not covered in this handbook. Students are not to use cell phones or any other electronic device to receive or place phone calls, text, surf the web, listen to music, read, or check email during clinical hours except during breaks. Preceptors may provide exceptions for emergencies that may arise.

ASCLS Code of Ethics

Students will adhere to the code of Ethics put forth by ASCLS during their clinical internships:

1. Duty to the Patient:

- i. Clinical laboratory professionals are accountable for the quality and integrity of the laboratory services they provide. This obligation includes maintaining individual competence in judgment and performance and striving to safeguard the patient from incompetent or illegal practice by others.
- ii. Clinical laboratory professionals maintain high standards of practice. They exercise sound judgment in establishing, performing and evaluating laboratory testing.
- iii. Clinical laboratory professionals maintain strict confidentiality of patient information and test results. They safeguard the dignity and privacy of patients and provide accurate information to other health care professionals about the services they provide.

2. Duty to Colleagues and the Profession:

- i. Clinical laboratory professionals uphold and maintain the dignity and respect of our profession and strive to maintain a reputation of honesty, integrity and reliability. They contribute to the advancement of the profession by improving the body of knowledge, adopting scientific advances that benefit the patient, maintaining high standards of practice and education, and seeking fair socioeconomic working conditions for members of the profession.
- ii. Clinical laboratory professionals actively strive to establish cooperative and respectful working relationships with other health care professionals with the primary objective of ensuring a high standard of care for the patients they serve.

3. Duty to Society:

- i. As practitioners of an autonomous profession, clinical laboratory professionals have the responsibility to contribute from their sphere of professional competence to the general well-being of the community.
- ii. Clinical laboratory professionals comply with relevant laws and regulations pertaining to the practice of clinical laboratory science and actively seek, within the dictates of their consciences, to change those which do not meet the high standards of care and practice to which the profession is committed.

Pledge to the Profession:

As a clinical laboratory professional, I strive to:

- Maintain and promote standards of excellence in performing and advancing the art and science of my profession.
- Preserve the dignity and privacy of others.
- Uphold and maintain the dignity and respect of our profession.
- Seek to establish cooperative and respectful working relationships with other health professionals.
- Contribute to the general well-being of the community.

I will actively demonstrate my commitment to these responsibilities throughout my professional life.

Confidentiality and HIPAA

All patient and institutional information will be kept strictly confidential. The discussion of any patient information outside of the classroom or internship setting is not permissible. Confidential information concerning the institution is not to be discussed with any unauthorized individuals. Students may be required to sign a confidentiality statement or complete additional HIPAA training at the hospitals. Violation of this policy and/or of other hospital or laboratory policies will result in the dismissal of the student from the hospital and the MLS program.

Accidents and Exposure

The clinical sites do not provide health coverage. If an exposure or accident does occur, notify the internship preceptor immediately. Follow the facility's established policies and protocols and submit a completed incident form to the MLS instructor immediately. The student is responsible for any charges that incur due to the accident or exposure.

Communication

Students are responsible for attaining and submitting current contact information of their preceptor to the Clinical Coordinator. This contact information will only be used in rare event that a student is failing to communicate with their preceptor(s). Students and preceptors should communicate directly with each other and should only involve lab managers/program directors if a professional conduct violation has occurred.

Background Checks and Drug Testing

Some clinical affiliates of the MLS program may require criminal background checks and/or drug testing prior to acceptance of the student into clinical facilities. Students who do not pass the criminal background check and/or drug test may be unable to attend clinical courses and therefore may be unable to complete their program of study. Any fees or cost associated with background checks and/or drug testing are the responsibility of the student.

Severe Weather

Severe weather that causes a shutdown of all classes and campus operations will also result in cancellation of clinical internships for the identical duration of the campus closure. If the student is at a clinical site not in the affected area, then they will continue their scheduled internship. Weather affecting sites distant from the campus will be measured against the closet public or private university. If the closest university closes all operations for inclement weather, the surrounding affected areas will also have canceled internships for the identical duration of school closures. Any days missed due to inclement weather will be excused and rescheduled as make up days.

Safety

Occupational Safety and Health Administration (OSHA) requirements must be observed at all times for your safety and the safety of your peers and patients. Students will follow these requirements in the student and clinical laboratory. Students who fail to follow safety and policy regulations will be asked to leave the classroom or clinical site. Students who fail to follow safety and policy regulations for a second time will be dismissed from the program at the discretion of the program director.

Immunizations

All students must meet the immunization requirements of their clinical internship sites. Any expense incurred in meeting these requirements is the responsibility of each individual student.

Acceptable Internship Progression

At the request of clinical sites; students may be removed if they are failing to progress in a satisfactory manner due to lack of skill, knowledge, or professionalism.

Depending on the severity and validation of the clinical site's request, one of two actions will occur. Either an attempt will be made to find another site for the student or the student will be dismissed from the program. If a second practicum site is obtained and the student is asked to be removed from the second site, the student will be dismissed from the program.

Service work

Service (or paid) hours and practicum rotation hours must be separated by the employer and student. No student may engage in service hours while completing clinical internship rotation hours. Service hours may be completed prior to or after practicum rotation hours.

Methods of Evaluation

The student's knowledge, skills, and affective behavior will be assessed by written examinations/exercises, task performance, and observation by practicum preceptors during all practicums. The final grade for a course will be determined by the scores earned in the categories as described below.

Checklists

These are the laboratory tasks and skills that are detailed for each section of the internship. The student must demonstrate acceptable progress and performance for these tasks in order to receive a satisfactory grade in the course. Additional tasks may be included as determined by the clinical affiliate. Entry level competency is expected for each task and students will be evaluated by preceptors as either competent or not competent. These will be submitted through Trajecsys by the clinical preceptor or designee.

Performance and Professionalism

A student's performance in the practicum area comprises their technical skills and professional behavior. Both will be evaluated by their practicum preceptors(s) for <u>each</u> rotation area. Practicum preceptor(s) will complete an evaluation at the end of the student's rotation. Some areas of the evaluation have been marked as high importance. Any unsatisfactory assessment in any of these areas may be grounds for probation or dismissal from the program.

Students will be evaluated using the following: Unsatisfactory, Satisfactory, and Outstanding. These forms will be submitted through Trajecsys by the clinical preceptor or designee.

Daily Logs and Other Documents

Students must record their daily activities. This includes documentation of instrumentation utilized, test names, abnormal results seen and approximate number either performed or observed and brief description of problem solving and trouble shooting incidents. Time of arrival and departure, special incidents, concerns, problems, instrumentation, and other pertinent items should also be recorded. The log must be submitted in Trajecsys on a daily basis. In addition to daily logs, the course instructor may post a question or assignment each week (in Canvas) and weekly summaries in Trajecsys.

Definition of evaluation terms

Unsatisfactory

This applies to tasks, skills, and behaviors in which the student does not meet the minimum criteria. In the judgment of the practicum preceptor and/or coordinator, the student's progress or behavior is unacceptable because of inferior quality (accuracy, precision, and organization), quantity of work, performance, and professional conduct. The student needs improvement.

Satisfactory

This applies to tasks, skills, and behaviors in which the student demonstrates acceptable progress and performance. The expected work is normally performed in an accurate, precise and organized manner within a reasonable amount of time, and with adherence to general and laboratory policies and professional conduct.

Outstanding

This applies to tasks, skills, and behaviors in which the student consistently performs above the expected criteria. The student exceeds expectations in quality, quantity, organization of work, and professional conduct.

Grading

Brief Description

% of Total

Competency Task Lists:	Competency Evaluations will be completed by the assigned clinical site. It will cover all areas listed on individual checklists for each area.	40%
Professional Evaluations/Clinical Site Evaluations	Professional Evaluation will be completed by the assigned clinical site. It will cover how students perform in the clinical site on a Likert scale of 1-5. The student will complete evaluations on each clinical site and department.	40%
Daily/Weekly Logs/ Assignments	Discussion posts and review questions will be completed in Canvas. Daily/Weekly logs, journals, and automation reports are completed in Trajecsys.	20%
	Total	100%

Grade Scale:

A 90 - 100 %

B 80 - 89 %

C70 - 79%

D 60 - 69 %

F Below 60 %

Submissions

Daily and Weekly Logs and Questions

The student will submit a daily log of their experience based on information recorded during clinicals in Trajecsys. Weekly logs will be submitted in Trajecsys. Other questions may be posted by the instructor in Canvas as well.

Technical Performance and Affective Behavior

Students are responsible for providing the instructor with the email addresses of their preceptors. The forms are posted on Canvas and submitted in Trajecsys as indicated.

Internship Checklists

Each rotation area has a specified list of skills and tasks. The student is responsible for providing the clinical faculty with these forms during the rotation if the site chooses to not use Trajecsys for documentation and to ensure their completion. Completed checklists will be submitted via Trajecsys.

Clinical Site Evaluations

Students are required to evaluate <u>each</u> internship rotation in order to ensure best and effective practicum experiences. Students will evaluate practicum rotations using an online form and submit in Trajecsys.

Assignments

The instructor may post assignments pertaining to the student's clinical site along with general topics. Automation reports for each and every instrument are also required to be posted in Trajecsys.

^{**}A grade of C or above must be achieved in order for the internship to be applied to the MLS degree. **

Student Responsibilities

Abide by the rules and policies of the clinical sites including:

- Hours of rotation
- Safety guidelines
- Proper notification of absences
- Make up of any time missed due to absences
- Abide by the dress code and conduct code of clinical site
- Adhere to the rotational schedule
- Provide own lodging, transportation, food, and other necessary expenses. The clinical rotation sites do not reimburse
- Adhere to the affective guidelines outlined in the student and school affiliation agreement
- Confirm that preceptors completed and submitted professional evaluation forms
- Completion of daily/weekly logs and questions
- Complete site evaluations of each department of practicum rotations
- Take notes as clinical preceptors do not have the time to repeat instructions numerous times

Clinical Supervisor/Preceptor Responsibilities

The clinical supervisor/preceptor is responsible for the following:

- Provide in-service training in the areas where the student is assigned. This includes all employee policies, start times, break times, and lunchtime, the principle of operation for instrumentation, procedures for determining acceptable test results, and the procedures for reporting result. The student should also be instructed in what to do if the test results are not valid.
- Ensure that the student is exposed to all techniques and procedures listed in the checklist provided.
- Provide the student with feedback on his/her performance periodically throughout the rotation.
- Counsel the student relative to poor performance.
- Notify the MLS clinical coordinator as soon as possible if a problem arises. The clinical coordinator and the supervisor should work together with the student to ensure success.
- Complete and submit the checklists and evaluation forms in Trajecsys.

Clinical Coordinator Responsibilities

The clinical coordinator for the medical laboratory sciences practicums is responsible for the following:

- Serve as the contact person for any issues (either site related or student related) surrounding the rotation.
- If a problem arises with a rotation schedule the clinical coordinator will work with the student and site to resolve it.
- Ensure that the student has had all the orientation information for the university
- Ensure that the student has satisfactorily met the affective, knowledge, and technical objectives for the rotation.
- Assign the grade for the rotation.
- The clinical affiliate site reserves the right to prematurely terminate a student's clinical experience if
 difficulties arise and cannot be resolved after meeting with the student and the MLS Program
 Director/Clinical Coordinator.

Immunology and Molecular Techniques Performance Checklist

Name:	Department: Immunology and
	Molecular Techniques

INSTRUCTIONS FOR CLINICAL INSTRUCTORS – Please read carefully.

Clinical instructors need to place their INITIALS for each of the skills listed in the rows they have covered with the student. It is critically important that the student paperwork be reviewed daily.

This checklist serves for tracking skills that the student has performed or observed and is considered as achieving entry level competence as an MLS. Your date/initials are signing off the student as competent.

Note: Each affiliate hospital Immunology/ Molecular area has a unique configuration; comprising major and minor "workstations". Each workstation differs in the number and type of equipment and complexity of testing performed. Even though the equipment mix will be different, there are several common tasks to be performed while rotating through the laboratory. By the end of the rotation, you should have performed these tests, under supervision, on all major pieces of equipment.

Please place the following letter(s) that coincide with the method of instruction.

Procedure	Method of Instruction	Date/ Tech Initials	Date/ Student Initials
1. Molecular Amplification Detection			
State the principle of the test.			
Explain the purpose of each component in reactions, cycle, and methods for ensuring adequate stringency. Perform amplification and probe assay of amplification.			
Observe sequencing of amplification product.			
Discuss issues of contamination. Discuss use of controls for accurate interpretation of results.			
Discuss interpretation of the results of amplification.			
Compare different methods for amplifying nucleic acids.			
Report approved results according to laboratory policy.			
Help perform preventative maintenance.			
Calibrate a procedure as available.			

Explain the principle of measurement of the instrument.		
2. Immunologic Detection		
State the principle of the test.		
Validate the sample by ID number, anticoagulant, and follow criteria for rejection of an inappropriate sample.		
Produce acceptable results with accuracy and demonstrate basic competence with applied techniques.		
List sources of error and implement appropriate corrective actions when needed.		
Perform the appropriate quality control procedures.		
Interpret and/or correlate test results to associated clinical states.		
Apply appropriate reference values for all tests performed.		
3. Antibody Titer		
State the principle of the test.		
Validate the sample by ID number, anticoagulant, and follow criteria for rejection of an inappropriate sample.		
Produce acceptable results with accuracy and demonstrate basic competence with applied techniques.		
List sources of error and implement appropriate corrective action.		
Perform the appropriate quality control procedures.		
Interpret and/or correlate test results to associated clinical states.		
Apply appropriate reference values for all tests performed.		
4. Antinuclear Antibodies		
State the principle of the test.		
Validate the sample by ID number, anticoagulant, and follow criteria for rejection of an inappropriate sample.		
Produce acceptable results with accuracy and demonstrate basic competence with applied techniques.		
List sources of error and implement appropriate corrective action.		
Perform the appropriate quality control procedures.		
Interpret and/or correlate test results to associated clinical states.		

Apply appropriate reference values for all tests		
performed.		
5. Fluorescent Antibody Detection		
State the principle of the test.		
Validate the sample by ID number, anticoagulant, and		
follow criteria for rejection of an inappropriate sample.		
Produce acceptable results with accuracy and		
demonstrate basic competence with applied techniques.		
List sources of error and implement appropriate		
corrective action.		
Perform the appropriate quality control procedures.		
Interpret and/or correlate test results to associated		
clinical states.		
Apply appropriate reference values for all tests		
performed.		
6. Serologic Procedures		
ANA		
Thyroid Antibodies		
Rheumatoid Factor		
Infectious Mononucleosis		
Labeled Immunoassays (ELISA)		
Nontreponemal Syphilis Testing (RPR)		
Treponemal Syphilis Testing (MHATP)		
Cytokine Testing		
Immunofluorescence		

Hematology and Coagulation Performance Checklist

Name:	Department:	Hematology/ Coagulation
INSTRUCTIONS FOR CLINICAL INSTRU	CTORS – Pleas	se read carefully.

Clinical instructors need to place their INITIALS for each of the skills listed in the rows they have covered with the student. It is critically important that the student paperwork be reviewed daily.

This checklist serves for tracking skills that the student has performed or observed and is considered as achieving entry level competence as an MLS. Your date/initials are signing off the student as competent.

Note: Each affiliate hospital Hematology/Coagulation area has a unique configuration; comprising major and minor "workstations". Each workstation differs in the number and type of equipment and complexity of testing performed. Even though the equipment mix will be different, there are several common tasks to be performed while rotating through the laboratory. By the end of the rotation, you should have performed these tests, under supervision, on all major pieces of equipment.

Please place the following letter(s) that coincide with the method of instruction.

Procedure	Method of Instruction	Date/ Tech Initials	Date/ Student Initials
1. Quality Control (As available)			
Perform QC on routinely used analyzers.			
Evaluate Levey-Jennings charts for Westgard Rule.			
Troubleshoot QC violations on all analyzers.			
Review and evaluate quality control data.			
Discuss/observe calibration procedure and protocol of			
different analytes.			
Discuss/observe frequency and procedure for linearity			
studies of equipment.			
2. Patient Samples (As available)			
Prioritizes samples based on urgency of test request.			
Correctly identifies patient samples.			

State the reasons for rejection of samples according to		
department protocol.		
State the sample types acceptable for each test performed		
in the hematology department.		
Evaluate samples for suitability for use: additive, QNS,		
etc.		
Identify preanalytical errors which will interfere with		
specific tests i.e., hemolysis, icterus, lipemia, etc.		
3. Blood Cell Morphology and Manual Cell		
Differentiation (As available)		
Prepare and stain blood smears for differential count and		
morphologic study of blood cells.		
Perform differential counts including WBC and platelet		
estimates on daily workload with results within values		
determined by supervisor.		
Lists the criteria for slides being reviewed by supervisor		
and/or pathologist.		
Identify and differentiate the common cell types found in		
peripheral blood.		
Complete normal differentials within +/- 20% accuracy		
of the counts performed by the automated method.		
Complete abnormal differentials within +/- 20%		
accuracy of the counts performed by the automated		
method.		
Complete reviews of RBC morphology within +/-20%		
accuracy of the clinical instructor.		
Identify and differentiate early and abnormal cells in		
peripheral blood.		
Calculate the corrected WBC count when nucleated red		
blood cells are present.		
State the clinical significance of certain blood cells and		
RBC morphology associated with clinical disease.		
4. Automated Cell Counting Devices (As		
available)		
Completes start up procedure for daily operation.		
Read/discuss principle of the instrument operation or test		
procedure reaction.		
Perform daily quality control and validate results within		
quality assurance program.	 	
Evaluate Levey-Jennings charts for Westgard Rule	 	
violations.		

Operate instrument in daily workload within time limits		
set by supervisor.		
Evaluate patient results for validity and acceptability.		
Perform routine maintenance procedures.		
Perform preliminary function checks for troubleshooting.		
Evaluate histograms/scatterplots for accuracy.		
State the clinical significance of abnormal results obtained, correlating to patient results as to possible disease and/or therapy states.		
Recognize "panic/critical values" and state action which must be taken when such a value is obtained on a patient sample.		
5. Manual Hematology Procedures (As available)		
Platelet counts/estimates		
Reticulocyte counts		
Erythrocyte Sedimentation Rate (ESR)		
CSF Count		
Other body fluid counts		
WBC count/estimates		
Hematocrit (spun)		
Sickle cell preparation or screening test		
Kleihauer-Betke stain or equivalent		
Flow Cytometry		
Buffy Coat preparation and stain		
Special Stains		
Malarial Smear		
Other: Please specify in comments.		
6. Bone Marrow Procedure (As available)		
Observe collection of bone marrow specimen, if available.		

F1-1- (111114>-1 1 C 11 c	Ī	1	
Explain (orally or in writing) the procedure for collection of bone marrow specimens.			
Describe handling of specimens for examination of the marrow.			
Stain slides for bone marrow examination.			
Perform 1 bone marrow differential within +/-20% of supervisor.			
7. Coagulation Analyzer (As available)			
Complete start up procedure for daily operation.			
Read/discuss principle of the instrument operation or test procedure reaction.			
Perform daily quality control and validate results within quality assurance program.			
Evaluate Levey-Jennings charts for Westgard Rule violations.			
Operate instrument in daily workload within time limits set by supervisor.			
Evaluate patient results for validity and acceptability.			
Perform routine maintenance procedures.			
Perform preliminary function checks for troubleshooting.			
State the clinical significance of abnormal results obtained, correlating to patient results as to possible disease and/or therapy states.			
Recognize "panic/critical values" and states action which must be taken when such a value is obtained on a patient sample.			
Correctly prepares reagents for coagulation testing following manufacturer's guidelines.			
Correctly performs operations on an automated coagulation instrument for the determination of PT, APTT, and Fibrinogen.			
8. Miscellaneous Coagulation Procedures (As available)			
Platelet Function (PFA)			
Platelet aggregation			
Thromboelastography (TEG)			
Fibrinogen			

Anti-Xa		
Antithrombin III		
PT and APTT correction/mixing studies		
Factor assays		
D-Dimer		
Other: Please specify in comment		

Microbiology Performance Checklist

Name:	Department: Microbiology
INSTRUCTIONS FOR CLINICAL IN	STRUCTORS – Please read carefully.

Clinical instructors need to place their INITIALS for each of the skills listed in the rows they have covered with the student. It is critically important that the student paperwork be reviewed daily.

This checklist serves for tracking skills that the student has performed or observed and is considered as achieving entry level competence as an MLS. Your date/initials are signing off the student as competent.

Note: Each affiliate hospital Microbiology area has a unique configuration; comprising major and minor "workstations". Each workstation differs in the number and type of equipment and complexity of testing performed. Even though the equipment mix will be different, there are several common tasks to be performed while rotating through the laboratory. By the end of the rotation, you should have performed these tests, under supervision, on all major pieces of equipment.

Please place the following letter(s) that coincide with the method of instruction.

Procedure	Method of Instruction	Date/ Tech Initials	Date/ Student Initials
1. Quality Control			
Perform quality assurance (QA) procedures on			
equipment, media, and tests. Discuss current and emerging molecular techniques and			
their use.			
2. Specimen Processing			
Demonstrate knowledge of procedures for handling			
improper/inappropriate specimens.			
Prioritize samples based on urgency of test requests.			
State the sample types acceptable for each test performed			
in the microbiology department.			
State the reason for rejection of samples according to			
department protocol.			
Correctly inoculates and streaks clinical material, using			
department protocol.			
Demonstrate knowledge of atmospheres (define ambient,			
anaerobic, increased CO2, and microaerophilic).			

3. Culture Work Up (As Available)		
Determine appropriate media for initial isolation for each		
specimen/source.		
State principle of biochemical tests used in identification		
of bacterial isolates.		
Demonstrate safe work practices such as autoclave,		
biohazard waste disposal, standard precautions, etc.		
Demonstrate proper inoculation, isolation, incubation,		
and quantitation techniques for the following:		
Clean Catch Urine		
Catheterized Urine		
Swabs		
Stool		
Tissue		
CSF/Other body fluids		
Other: Please specify in comment.		
Identify colonial characteristic of normal flora and		
pathogens from the following:		
Urine		
Stool		
Respiratory		
Genital		
Wound		
Sterile body site		
Other: Please specify in comment.		
Identify colonial characteristic of normal flora and		
pathogens including the following bacteria:		
Staphylococcus aureus		
Coagulase negative Staphylococci		
Beta hemolytic Streptococci		
Enterococcus		
Alpha hemolytic Streptococci		
Enterobacteriaceae		
Non fermentative GNB		
Neisseria		
Haemophilus		
Serotype bacteria based on serological procedures to		
include the following:		
Salmonella/Shigella/E. coli		
Beta streptococci		

State principle, performs and interprets antimicrobial susceptibility tests for the following: Kirby Bauer Beta lactamase test/screen Other: Please specify in comment. 4. Reporting Results Perform and interpret gram stain results for the following: Sputum Urethral smear for GC Wounds Sterile Body Fluids Other: Please specify in comment. Properly identify results with "critical/panie" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing Optochin sensitivity or Strep typing
Kirby Bauer Beta lactamase test/screen Other: Please specify in comment. 4. Reporting Results Perform and interpret gram stain results for the following: Sputum Urethral smear for GC Wounds Sterile Body Fluids Other: Please specify in comment. Properly identify results with "critical/panie" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Beta lactamase test/screen Other: Please specify in comment. 4. Reporting Results Perform and interpret gram stain results for the following: Sputum Urethral smear for GC Wounds Sterile Body Fluids Other: Please specify in comment. Properly identify results with "critical/panie" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Other: Please specify in comment. 4. Reporting Results Perform and interpret gram stain results for the following: Sputum Urethral smear for GC Wounds Sterile Body Fluids Other: Please specify in comment. Properly identify results with "critical/panie" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
4. Reporting Results Perform and interpret gram stain results for the following: Sputum Urethral smear for GC Wounds Sterile Body Fluids Other: Please specify in comment. Properly identify results with "critical/panie" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
following: Sputum Urethral smear for GC Wounds Sterile Body Fluids Other: Please specify in comment. Properly identify results with "critical/panic" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
following: Sputum Urethral smear for GC Wounds Sterile Body Fluids Other: Please specify in comment. Properly identify results with "critical/panic" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Sputum Urethral smear for GC Wounds Sterile Body Fluids Other: Please specify in comment. Properly identify results with "critical/panic" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Urethral smear for GC Wounds Sterile Body Fluids Other: Please specify in comment. Properly identify results with "critical/panic" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Sterile Body Fluids Other: Please specify in comment. Properly identify results with "critical/panic" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Other: Please specify in comment. Properly identify results with "critical/panic" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Other: Please specify in comment. Properly identify results with "critical/panic" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Properly identify results with "critical/panic" ranges and acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
acts upon those results accordingly. State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
State the clinical significance of abnormal results obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
obtained, correlating patient results as to possible disease and/or therapy states. 5. Instrumentation State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
State the principle, performs and interprets operation of any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
any automated equipment used in the laboratory (Ex: Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Vitek, MALDI-TOF, blood culture analysis). Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Perform necessary maintenance procedures. Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Correctly sets up ID and sensitivity panels. 6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
6. Miscellaneous Tests Performed Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Occult Blood Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Catalase Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Coagulase or Staph typing Bacitracin sensitivity or Strep typing
Bacitracin sensitivity or Strep typing
Bacitracin sensitivity or Strep typing
Optochin sensitivity or Strep typing
Oxidase
Indole
X and V factor requirements/Quad plates for
Haemophilus
Germ tube
API and/or NHI
PYR
Wet mounts
MRSA Screen Protocol
Microdase disc

Catarrhalis disc		
Gen Probe		
Participate in preparation of specimens to be sent to		
reference laboratories.		
7. Anaerobes		
Discuss proper specimen collection and transport of		
anerobic cultures.		
Select proper media for anaerobic cultures.		
Establish anaerobic environment for culture (GasPak,		
BioBags, etc).		
Recognize microscopic and colonial morphology of		
normal flora and potential pathogens.		
8. Parasitology		
Discuss proper specimen collection, transport and		
processing.		
Perform a concentration procedure.		
Prepare fecal smears (direct smear, iodine prep,		
concentrated smears and permanent smears).		
Participate in the reading of parasitic preparations for		
parasites.		
Prepare thick and thin smears for hemoflagellates.		
Recognize diagnostic stages of the following intestinal		
protozoa:		
Hemoflagellates		
Malaria		
Helminths		
Coccidian		
Examine department study slides.		
9. Mycology		
Discuss proper specimen collection, transport and		
processing.		
Perform wet mounts (KOH, India Ink, or LPCB).		
Perform and read slide culture.		
Identify morphological features of clinically significant fungi.		
Identify and select proper fungal media for a given		
source.		

D' 1' 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	
Discuss clinical significance of fungal isolates from a			
given source and patient.			
Identify molds and yeast following the procedures set up			
by the laboratory.			
Examine department study slides.			
10. Mycobacteriology			
Discuss safety precautions for both patients and specimens.			
Process specimens including digestion and decontamination procedures.			
Perform and read acid fast stains, modified acid-fast stains and fluorescent stains.			
Identify isolates based on colonial and biochemical characteristics.			
Perform and/or discusses antimycobacterial susceptibility testing and therapy.			
Identify mycobacterial culture media.			
Classify the Mycobacteria species according to Runyoun groups.			
Examine department study slides.			
11. Virology			
Discuss proper specimen collection, transport and			
processing.			
Describe clinically significant viruses.			
Perform and/or discuss identification methods (culture, serology, molecular methods, etc).			
	•		

Urinalysis and Body Fluids Performance Checklist

Name:	Department: Urinalysis and Body Fluids
INSTRUCTIONS FOR CLINICAL INSTR	RUCTORS – Please read carefully.

Clinical instructors need to place their INITIALS for each of the skills listed in the rows they have covered with the student. It is critically important that the student paperwork be reviewed daily.

This checklist serves for tracking skills that the student has performed or observed and is considered as achieving entry level competence as an MLS. Your date/initials are signing off the student as competent.

Note: Each affiliate hospital Urinalysis and Body Fluids area has a unique configuration; comprising major and minor "workstations". Each workstation differs in the number and type of equipment and complexity of testing performed. Even though the equipment mix will be different, there are several common tasks to be performed while rotating through the laboratory. By the end of the rotation, you should have performed these tests, under supervision, on all major pieces of equipment.

Please place the following letter(s) that coincide with the method of instruction.

P= Performed O= Observed D=Discussed NP= Not Performed

Procedure	Method of Instruction	Date/ Tech Initials	Date/ Student Initials
1. Quality Control (As available)			
Perform QC on routinely used analyzers.			
Record and evaluate quality control data.			
2. Physical and Chemical Tests (As available)			
Validate clinical specimens, including specimen ID, preservatives (if necessary), and rejection of inappropriate samples. Organizes samples, reagents, and equipment utilizing			
priority.			
Perform routine physical and chemical tests accurately.			
Evaluate the need for confirmatory tests.			
Recall the effects of deterioration of urine specimens with prolonged sitting.			
Demonstrate knowledge of the principles and theories of the various dipstick and tablet tests.			

Danagaine varietiens in masulta from named and state the		
Recognize variations in results from normal and state the significance of the results.		
Dispose of specimens and reagents properly following		
established safety procedures.		
3. Microscopic Examination (As available)		
Prepare urine sediment for examination.		
Identify and enumerate clinically significant particles in		
the urine by use of stain or bright field, polarized, or		
phase microscopy.		
Enumerate red blood cells and white blood cells in unstained urine sediment.		
Identify the types of casts seen in urine sediment.		
Identify crystals found in urine sediment.		
State the clinical significance of crystals in normal and		
abnormal urine sediment.		
Identify and enumerate bacteria seen in urine sediment.		
Correlate the findings of microscopic structures with chemical tests and their significance.		
4. Miscellaneous Tests		
Specific Gravity		
Copper reduction (Clinitest)		
Acetest		
Semen Analysis		
Pregnancy Testing		
Other: Please specify in comments		
5. Body Fluid Analysis (As available)		
Discuss the proper collection, transport, and storage of body fluids: Synovial, CSF, BAL, Peritoneal, Other		
Perform cell count on fluids (CSF, Synovial, etc).		
Perform crystal evaluation on synovial fluids.		
Correctly evaluates gross appearance and color including xanthochromia, if relevant.		
Discuss the type and significance of crystals found in synovial fluid.		
Discuss the process for referral to pathologist for review.		

Specimen Collection and Processing Performance Checklist

Name:	Department: Specimen Collection and
	Processing

INSTRUCTIONS FOR CLINICAL INSTRUCTORS – Please read carefully.

Clinical instructors need to place their INITIALS for each of the skills listed in the rows they have covered with the student. It is critically important that the student paperwork be reviewed daily.

This checklist serves for tracking skills that the student has performed or observed and is considered as achieving entry level competence as an MLS. Your date/initials are signing off the student as competent.

Note: Each affiliate hospital Specimen Processing area has a unique configuration; comprising major and minor "workstations". Each workstation differs in the number and type of equipment and complexity of testing performed. Even though the equipment mix will be different, there are several common tasks to be performed while rotating through the laboratory. By the end of the rotation, you should have performed these tests, under supervision, on all major pieces of equipment.

Please place the following letter(s) that coincide with the method of instruction.

Procedure	Method of instruction	Date/ Tech Initials	Date/ Student Initials
1. Venipuncture (As available)			
Demonstrates proper handwashing and gowning.			
Properly identifies the patient according to the institution's policy.			
Selects proper equipment for tests ordered.			
Prepares venipuncture site and performs unaided successful collections venipuncture correctly.			
Student performed blood draws.			
Labels specimens correctly, according to the institution's policy.			
Delivers specimen to correct department for testing.			
2. Capillary Blood Samples (As available)			
Demonstrates proper handwashing and gowning.			

	T	1	,
Properly identifies the patient according to the			
institution's policy.			
Selects proper equipment for tests ordered.			
Select correct site for skin puncture, cleanse it			
properly and collect specimen.			
Labels specimens correctly, according to the			
institution's policy.			
Delivers specimen to correct department for testing.			
Observes collection of specimen(s) on infant.			
3. Blood Cultures (As available)			
Properly identifies the patient according to the			
institution's policy.			
Prepares venipuncture site and specimen containers.			
Perform venipuncture obtaining adequate sample			
and distributing it into bottles correctly.			
Labels specimens correctly, according to the			
institution's policy.			
4. Miscellaneous Collection Procedures (As			
available)			
Observes collection of blood specimens from			
isolation patients.			
Discuss special handling requirements of certain			
tests.			
Properly handles test requests with priority (STAT,			
timed, routine, ASAP).			
Properly prepares samples for testing in hematology,			
chemistry, and immunohematology departments.			
Properly prepares samples for transport to reference			
laboratories.			
5. Specimen Processing			
Adheres to department safety regulations.			
Prepares work area for accession.			
Correlates patient name with times, dates, and test			
requests.			
Generates worksheets and correlates specimens on			
hand with worklists.			
Centrifuges specimens according to lab protocols.			
	1	1	1

Separates specimens according to department.		
Affixes labels to aliquot tubes matching original tube to aliquot tubes.		
Aliquots specimen as needed.		
Prepares specimens for send out testing according to lab protocols.		
Communicates with responsible parties to resolve errors.		

Management and Ethics Performance Checklist

Name:	Departn	nent: Manage	ment and l	Ethics
INSTRUCTIONS FOR	CLINICAL INSTRUCTORS –	Please read ca	refully.	
	o place their INITIALS for each odent. It is critically important that			•
	racking skills that the student has ntry level competence as an MLS.	•		
Please place the	following letter(s) that coincide w	ith the method	of instruction	on.
P= Performed	O= Observed D=Discuss	ed NP= Not	Performed	
P	rocedure	Method of Instruction	Date/ Tech Initials	Date/ Student Initials
1. Management				
Following the event, sun contributing to the team team efforts which lead to Discuss the process used	linary patient care team events. marize health profession roles care of the patient and describe to improved patient care. It to analyze the results of low to generate a correction			
Protects patient's confid	entiality at all times.			
Discuss the Point of Car facility, if available.	e Testing (POCT) system for the			
hospital.	podies of the laboratory and			
	essment requirements of (frequency, who signs off who,			
2. Safety				
Review the chemical hy information added within	giene plan and describe any new new the last year.			

Review the biological waste disposal regulations applicable to the lab and explain how to perform

adequately the biological waste disposal.

Name:

D ' d 11	T	
Review the laboratory compliance plan and discuss with		
the lab manager the responsibilities of the lab manager		
and the delegation process applied to maintain		
compliance with all regulations.		
Review the facility's emergency procedures (needlestick,		
splashes, fire, etc.).		
Follows all clinical affiliate and OSHA safety		
requirements for working in a clinical laboratory.		
Manages problems logically and systematically, handling		
interruptions skillfully in stressful situations.		
Demonstrate the proper use of PPE.		
Locate and review Safety Data Sheets (SDS) for		
chemicals and reagents in the laboratory.		
3. Communication		
Completes written, oral, and electronic laboratory reports		
accurately, using the format of the clinical affiliate.		
Overall demeanor is polite, considerate, and shows self-		
confidence in a generally pleasant and firm diplomatic		
manner when dealing with patients and healthcare		
personnel.		
4. Accountability		
Listens to criticism and constructively acts upon		
suggestions to improve performance.		
Completes assignments in a timely manner.		
5. Reliability		
Keeps the working area and equipment clean and orderly		
without being reminded.		
Upon arrival at the laboratory, immediately assesses		
work to be done and gets started.		
Respects the policies of the facility in regard to start and		
ending time of rotation day, lunch and break time		
assignments.		
Respects workflow of the facility by giving advanced		
notice of absences of the lab.		
· ·	l	

Immunohematology Performance Checklist

Name:	Department: Immunohematology
INSTRUCTIONS FOR CLINICAL	INSTRUCTORS – Please read carefully.

Clinical instructors need to place their INITIALS for each of the skills listed in the rows they have covered with the student. It is critically important that the student paperwork be reviewed daily.

This checklist serves for tracking skills that the student has performed or observed and is considered as achieving entry level competence as an MLS. Your date/initials are signing off the student as competent.

Note: Each affiliate hospital Immunohematology area has a unique configuration; comprising major and minor "workstations". Each workstation differs in the number and type of equipment and complexity of testing performed. Even though the equipment mix will be different, there are several common tasks to be performed while rotating through the laboratory. By the end of the rotation, you should have performed these tests, under supervision, on all major pieces of equipment.

Please place the following letter(s) that coincide with the method of instruction.

Method of Instruction	Date/ Tech Initials	Date/ Student Initials
		Method of Instruction Tech

State the sample types acceptable for each test performed		
in the transfusion service. State the indications for transfusion of each blood		
component available.		
3. Routine Testing		
Perform ABO/D and Antibody Screens accurately.		
State the most encountered ABO discrepancies with resolutions.		
State the workup required, including lectin used, for an A2 with an Anti-A1 antibody.		
Perform major crossmatch, immediate spin.		
Perform major crossmatch, AHG.		
State selection of ABO/D compatible blood when blood type is not available OR special circumstances arise, I.e., antibodies present.		
State special needs for transfusion: CMV neg, irradiated, washed, etc.		
Correctly perform antibody identifications.		
Correctly identify primary antibody specificity.		
State additional testing to perform when antibody screen is positive.		
Perform additional antibody typing, if available. Includes selection of appropriate controls for typing sera used.		
Discuss and/or observe appropriate use of enzyme treated cells, neutralizations, elutions, auto adsorptions, etc.		
List and state the antibody class, phase of reactivity, clinical significance and transfusion requirements for the following: Rh, Jk, K, Fy, Lutheran, M, N, S, Le, P1 and I.		
Perform Direct Antiglobulin Testing (DAT) on adult samples.		
Discuss and/or perform an elution.		
Discuss when the Rh Immune Globulin workup is performed.		
Perform and/or discuss the Fetal Blood Screen.		
Discuss the Kleihauer-Betke (KB) stain.		
Given the results of a KB stain, determine the number of vials of RhIg needed.		

D 0 D D 0 1D1 1	<u> </u>
Perform DAT on Cord Bloods.	
State ABO/D type and other special requirements for	
routine transfusions of neonates.	
State the three types of HDFN and antibody specificities	
involved.	
Discuss and/or observe a transfusion reaction workup.	
Other: Please specify in comments.	
4. Blood Components	
Discuss appropriate utilization of cryoprecipitate, fresh	
frozen plasma, CMV negative RBCs, platelets and other	
products.	
Discuss and/or observe component processing such as	
irradiation, pooling, aliquoting, and concentrating.	
Discuss and/or perform issuance of compatible blood	
components.	
Discuss and/or perform issuance of factors.	
State the evaluation of component appearance and reason	
for rejection.	
State the information which must appear on a unit of	
blood prior to issue.	
State the recommended storage temperature for each	
component.	
State expiration time for each component.	
Discuss stock levels of components required at site.	
Other: Please specify in comments.	
5. Donors	
Donor Interview (if done in house).	
Donor Phlebotomy (if done in house).	
Discuss and/or observe transfusion transmitted disease	
testing.	
Discuss adverse reactions from donor collection.	
Discuss the different types of special donations	
(autologous, directed, etc).	

Clinical Chemistry Performance Checklist

Name:		_ Department:	Clinical Chemistry
-------	--	---------------	---------------------------

INSTRUCTIONS FOR CLINICAL INSTRUCTORS – Please read carefully.

Clinical instructors need to place their INITIALS for each of the skills listed in the rows they have covered with the student. It is critically important that the student paperwork be reviewed daily.

This checklist serves for tracking skills that the student has performed or observed and is considered as achieving entry level competence as an MLS. Your date/initials are signing off the student as competent.

Note: Each affiliate hospital Clinical Chemistry area has a unique configuration; comprising major and minor "workstations". Each workstation differs in the number and type of equipment and complexity of testing performed. Even though the equipment mix will be different, there are several common tasks to be performed while rotating through the laboratory. By the end of the rotation, you should have performed these tests, under supervision, on all major pieces of equipment.

Please place the following letter(s) that coincide with the method of instruction.

Procedure	Method of Instruction	Date/ Tech Initials	Date/ Student Initials
1. Quality Control (As Available)			
Perform QC on routinely used analyzers.			
Evaluate Levey-Jennings charts for Westgard Rule.			
Troubleshoot QC violations on all analyzers.			
Review and evaluate quality control data.			
Discuss/observe calibration procedure and protocol of different analytes.			
Discuss/observe frequency and procedure for linearity studies of equipment.			
2. Patient Samples (As Available)			
Correctly identifies patient sample.			

	<u></u>	
Discuss the reasons and follow-up procedures for		
rejection of samples according to department protocol.		
Identify preanalytical errors and/or physiological		
conditions which will interfere with specific tests, i.e.,		
hemolysis, icterus, incorrect tube additive, etc.		
Validate clinical specimens including specimen ID,		
proper anticoagulants, and rejection of inappropriate		
samples.		
-		
Prioritizes samples based on urgency of test request.		
State the reason for rejection of samples according to		
department protocol.		
Labels transfer tubes completely and accurately.		
Stores samples in appropriate storage conditions.		
3. Miscellaneous Tasks		
3. Miscenaneous Lasks		
Organizes samples, specimen log, reagents, and		
equipment.		
Read/discuss principle of instrument operation or test		
procedure reaction.		
D 1 1 1		
Prepare reagents and standards as necessary.		
Maintain equipment in proper working order.		
Perform instrument startup and/or shutdown.		
Totalin instrument startup and of shared with		
Appropriately acts on results beyond the linearity and/or		
reportable range of the instrument.		
Discuss "critical/panic values" and reporting protocol.		
Discuss critical/painte values and reporting protocol.		
Assist in troubleshooting basic procedural problems.		
4. Laboratory Calculations (As available)		
Accurately performs dilutions using appropriate ratios		
and proper diluting fluid.		
Accurately performs creatinine clearance calculation.		
J 1		
5. Evaluation of Results Obtained (As available)		
(
Validate results for reporting.		
, and and results for reporting.		
Recognize abnormal values, correlate with other		
laboratory results, and explain the clinical significance		
correlating patient results to possible disease and/or		
therapy states.		

D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	T .	
Reports approved results according to laboratory policy.			
State additional tests to perform when abnormal results are obtained.			
6. Biochemical Testing (As available)			
Perform Comprehensive Metabolic Panel to include the following: Glucose, BUN, creatinine, electrolytes, uric acid, total protein, albumin, T.bili, D.bili, Calcium, Magnesium (if performed), ALP, Phos, AST, ALT, CK, LD Note: components of the panel may be run on different instruments separately			
Perform Lipid Panel to include the following: Cholesterol, triglycerides, LDL, HDL Apolipoprotein (if performed) Note: Student must include interpretation of cardiac risk			
Perform Cardiac Marker testing to include: CK, CKMB, Troponin Note: Student must be able to interpret results			
Perform and can correctly evaluate results of the following tests:			
HbA ₁ C			
CSF for protein, glucose			
Urine electrolytes			
Creatinine Clearance			
Amylase			
Lipase			
Ammonia			
Iron and TIBC			
Electrophoresis			

Body fluid analysis to include: Synovial, CSF, etc		
Osmolality		
Arterial Blood Gas (ABG)		
If instrument includes COOX and other metabolites as		
part of the menu, they should be included		
7. Therapeutic Drug Monitoring,		
Toxicology/Endocrinology		
Validate clinical specimens as appropriate to TDM,		
toxicology, and endocrinology test requested.		
Correlate TDM, toxicology, and endocrinology results to		
appropriate reference ranges.		
Recognize critical TDM, toxicology, and endocrinology		
values and respond in accordance with lab policy.		
Explain the principle of selected TDM, toxicology, and		
endocrinology procedures as required by the clinical		
instructor.		
Perform therapeutic drug testing from the following:		
Theophylline, Gentamycin, Tobramycin, Diazepam,		
Digoxin, Dilantin, Tegretol, Depakene etc.		
Perform drugs of abuse screen		
Perform hormone testing from the following:		
PTH, T3/T4, TSH, Cortisol, FSH, LH, PRL, ADH, HCG,		
Progesterone, Estrogen, etc.		
_		

TRAJECSYS INFORMATION

All clinical documentation will be recorded and stored in the Trajecsys system. Both students and preceptors must register at www.trajecsys.com to use the system. A fee is paid by the student for the use of this document management system. There is no charge for the clinical site. Once a student has graduated, they may still access their clinical records for up to 7 years.

Trajecsys: Registration

If you have not already registered with Trajecsys, go to the Trajecsys website: https://www.trajecsys.com and then follow these directions:

- In the upper right-hand corner, click on Register
- Enter Thomas University as the Educational Institution
- Enter your name
- Click on New Student
- Choose MLS (your course name). You will not pay for this--the school will submit payment.
- Choose Georgia as the area
- Create your Username and Password

Trajecsys: Clocking In and Out

You MUST clock into your clinical site in order for your clinical preceptors to be able to complete your competencies and evaluations.

Once you log on Trajecsys, you are on the "Clock In" page. Simply choose your site from the drop-down menu and then click clock IN. Note that you are immediately logged out of the Trajecsys system. That is because you should not be on the computer or phone while you are in clinicals. You should make note of the procedures you complete and who you worked with each day and enter that information into the Trajecsys system later. Return to the Trajecsys site and Clock Out after you complete clinicals for the day.

Trajecsys: Daily Logs

You are required to complete a Daily Log documenting whatever you do in clinicals and the preceptor that you worked with EACH DAY.

- Log into Trajecsys
- Click on Logs
- Click on Add Logsheet
- Click on the department where you worked.
- Click on the skill that you worked on. For example, if you worked in Blood Bank and did Type and Screens, you will choose Immunohematology and then Routine Testing. If you watched a tech, then first enter Observed. You can then go back and enter the ones that you Performed.
- Choose the preceptor that you worked with. If the name is not listed, click on New Supervising Employee and enter the name.
- Enter the time that you spent on this skill in hours and minutes and then click NEXT.
- In the comment box, list the number of skills or procedures that you completed. Using the example above, you would enter "Completed 25 type and screens using the tube method."
- Click NEXT to complete your entry.

Trajecsys: Weekly Log Journal

You will also need to document a short summary of what you did each day in clinicals.

- Log into Trajecsys
- Click on Evaluations
- Click on Weekly Log Journal
- Type a 5-7 sentence summary of what you did in clinicals that week. Here is an example: "I worked in the Hematology department. I was able to run QC in the mornings on the LH 7800 analyzer. I ran level 1 and 3 as is the procedure for the morning shift. After that, I helped complete the morning run and made slides for the ones that needed manual diffs. Then I read the manual diff slides after the tech reported them out and compared my results with hers. I also ran the daily QC on the Hemolyzer 3000."
- Click Submit
- Click on the little X on the right side of the box to exit

Trajecsys: Automation Report

You will need to complete an Automation Report on any analyzer that you work with and/or are trained on. You may wait until you have finished your department rotation or complete this as you go along.

- Log into Trajecsys
- Click on Evaluations
- Click on Automation Report
- Click on the department
- Fill out the information for each question/item. Click Submit

Trajecsys: End of Rotation Evaluations

Once you have completed your clinical rotation, you will need to complete 2 different evaluations on the site and department. You will complete them for EACH department.

- Log into Trajecsys
- Click on Evaluations
- Click on Clinical Affiliate Orientation Checklist (You can complete this one when you begin your rotation)
- Fill out the evaluation
- Click on Submit
- Click on Clinical Rotation Student Evaluation (Completed at the end of your department rotation)
- Fill out the evaluation--put the department in comments -Click on Submit

Instructions for Clinical Preceptors

Choose the Area as <u>Georgia</u> Choose your Site

To submit Competency Evaluations, choose Comp Evals from the menu on the left.



Choose the Site, Student, and department (Major Study) you are evaluating. You can then choose the procedures the student has completed/competent.

Next, you will need to complete the Professional Evaluation. Choose the highlighted tab



Choose Clinical Rotation Professional Evaluation —enter department. Enter the student name in the Subject line and then the site from the pull down menus. Click on the department. An evaluation should be completed for each department. Click on the department you are completing competencies.

Clinical Chemistry
 Heme / Coag
 Immunohematology
 Immunology and Molecular Techniques
 Microbiology
 Urinalysis
 Management / Work Ethic
 Specimen Collection and Processing

Select the number that you are awarding as the grade, any comments, and then select "submit" at the bottom.



MEDICAL LABORATORY SCIENCE PROGRAM CLINICAL INTERNSHIP HANDBOOK 2023-2024

I,, certify that I have	re a copy of the MLS Program Clinical
Internship Handbook 2023-2024. I have reviewed the information carefully and understand that I am accountable for all of the information in the Handbook. I further understand that I am responsible for clarifying with the MLS Program Director any areas that I do not understand.	
I have been given the opportunity to ask any questions that I have about the Clinical Internship Handbook.	
I have read, understand, and agree to perform the duties of my clinical internship as described in the handbook.	
I have been advised that the information in the MLS Program Clinical Internship Handbook is valid for the period beginning August 2023 and ending August 2024.	
Student Signature	Date