KU SCHOOL OF HEALTH PROFESSIONS
The University of Kansas

Clinical Rotation Handbook

For

Clinical Laboratory Sciences

Spring / Fall 2021

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Clinical Laboratory Sciences Department
University of Kansas Medical Center

Clinical Rotations (Practicums)

Purpose

The purpose of this handbook is to provide information about your clinical rotations and to provide you some guidelines in developing your new role. Essentially, you are still a student, but with responsibilities similar to an employee. Under the guidance and supervision of a Clinical Liaison and one or more Clinical Instructors, the clinical laboratory science student is expected to meet practicum goals and objectives, which directly relate to the theory and practice of clinical laboratory sciences. Thus, the practicum is an opportunity to become immersed in the clinical setting, to use your knowledge base to make decisions, to communicate and collaborate with others in the clinical setting, and to refine your technical skills. You will be functioning as an important member of the health care team, with increased responsibility and accountability for your own decisions and actions. In other words, learning at the clinical site(s) is ***your*** responsibility but supervised by KUMC CLS faculty and facilitated by a team of experienced Clinical Laboratory Scientists at various levels.

Clinical Instructors

Each clinical affiliate has a specified Clinical Liaison/Education Liaison and Clinical Instructor(s) for each of the laboratory sections. Clinical Instructors expect students to be prepared for each day by reviewing relevant material from on campus courses. They expect students to have a solid foundation in theory. Clinical Instructors are not in a position to provide basic theory review or instruction.

Clinical Affiliate	Clinical/Education Liaison
Advent Health	Lisa Tucker-Ruprecht, MT(ASCP)
Children's Mercy Hospital	Sandy Claussen, MT(ASCP)
Lawrence Memorial Hospital	Jessica Martinez, MLS(ASCP)^{cm}
Mosaic Life Care	Jennifer Sapp, MT(ASCP)
Olathe Medical Center	Norma Battle, MT(ASCP)
Quest Diagnostics	Michael Hughes, MT(ASCP)
Stormont Vail – Topeka	Gail Allen, MLS(ASCP)
Truman Medical Center	Mary Tiano, MT(ASCP)
TUKHS St. Francis – Topeka	Nate Burmeister, MLS(ASCP)
TUKHS	Eric Rosa, MLS(ASCP)^{cm}
VA Medical Center – Kansas City	Amanda Johnson, Pam Goff

Course Information

Course(s): Clinical Practicum (Rotations)

Prerequisite: Completion of prerequisite CLS curriculum as indicated in the CLS Student Handbook distributed upon entry into KUMC CLS professional Program.

Course Number	Name	Credit
CLS 639	Urinalysis Practicum	1
CLS 641	Chemistry/Immunology Practicum	3
CLS 643	Microbiology Practicum	3
CLS 645	Immunohematology Practicum	2
CLS 647	Hematology Practicum	3

Practicum / Clinical Rotation Description

A structured clinical laboratory experience; where students integrate theory and application under supervision in various areas of the clinical laboratory. After demonstrating competency, students, with qualified supervision, may be permitted to perform procedures. Time and facilities are provided for students to develop speed, confidence, organization, and to analyze and solve technical problems.

Program Professional (Affective) and Psychomotor Objectives

Overall program objectives to be achieved upon completion of the two-year program are posted in the Learning Management System (LMS) and are also available in the Clinical Laboratory Science Students Handbook.

Site Visits and Daily Journals

Periodic site visits will be scheduled by KUMC Department of CLS with each clinical facility during the designated 16-week clinical experience for the purpose of review and evaluation of student progress.

Students will maintain and submit, on a weekly basis to CLS faculty, a daily journal of clinical activities and experiences.

General Performance Objectives

During the clinical practicums the Clinical Laboratory Sciences student will:

A. Perform assigned tasks under the supervision and direction of a qualified Clinical Instructor according to established policies and procedures.

B. Develop skills in laboratory tasks by:
   1. performing tests and related tasks
   2. operating and maintaining instruments
   3. evaluating acceptability of laboratory data
   4. correlating patient laboratory data
   5. evaluating and comparing procedures and methods
   6. reporting patient values according to standard procedures
   7. obtaining and evaluating acceptability of patient specimens

C. Demonstrate skill development and practice by:
   1. completing performance tasks checklists according to written criteria
   2. recording and submitting clinical practicum journals
   3. completing unknowns, if applicable

D. Enhance knowledge by completing assigned web-class that accompanies each clinical practicum.

E. Demonstrate professional attributes as reflected in the professional evaluation that includes but is not limited to the following:
   1. cleanliness of dress and workstation
   2. punctuality and meticulousness
   3. careful attention to conversation with others
   4. willingness to comply with safety regulations
   5. increased efficiency
   6. adherence to honesty and confidentiality
   7. willingness to accept responsibility for own actions
   8. adherence to hospital and laboratory policies and procedures

Policies

Contact Hours

A practicum schedule based on required contact hours for each individual course will be prepared for each student. Students are required to adhere to this schedule unless specified otherwise by the Department Head and/or appropriate Clinical Liaison.

Specific times for arrival and departure will be determined for each clinical area in cooperation with the Clinical Instructor and/or Clinical Liaison by Department Head. The student should note that the time for arrival will vary by clinical site and rotation area.

During each 8-hour workday, one (1) half-hour lunch will be scheduled by the Clinical Instructor. Breaks will also be determined and scheduled by the Clinical Instructor.

Attendance

Attendance in the clinical practicum for all of the scheduled days is required. If the student cannot attend, the Clinical Instructor or Clinical Liaison ***and*** the University faculty ***must be informed***. Each day the student is ill he/she must "call-in", even if it was predetermined the previous day. **It is the responsibility of the student to contact the appropriate individual(s) at each institution.**

Absences may be allowed for serious sickness, bereavement of immediate family, or other special circumstances such as court appearance, jury duty, and childbirth. Any absence, whether excused or unexcused, will be made up at the discretion of the Clinical Instructor in consul
tation with the site Clinical Liaison and KUMC Department of CLS Faculty. Failure on the part of the student to properly communicate may result in administrative withdrawal from the course. Special circumstances do not include time for student to study for tests or complete other course work requirements, oversleeping, routine medical/dental appointments, job interviews or sick pets. Any request by a student to be excused from the practicum should be verified by the Instructor and/or Clinical Liaison with the program director at the University.

Tardiness is not permissible: If under certain circumstances the student expects to be late by 15 or more minutes, then he/she must contact the Clinical Instructor. Unexplained/unexcused/repeated tardiness will be reflected on the professional evaluation.

Student should not be dismissed from the practicum early unless there are special reasons or justification for such. These should be consistent with the above guidelines for absences.

Inclement Weather Policy

If weather conditions (such as heavy snow, ice, extreme thunderstorms etc.) make travel to and from campus excessively difficult, time consuming, or hazardous, the University may declare that an inclement weather condition exists. The declaration may include a determination that campus will close. If a declaration of inclement weather is made, the University will strive to inform the campus community as soon as possible. If such determination is made in the morning before classes or clinical assignments start, the University will make every effort to inform the campus community by 5:45AM. When an inclement weather declaration is made, the campus community will be notified as follows:

1. RAVE Alert Messaging System for emergency notification to faculty, staff, employees, residents, and students.
    a. If you have not registered for RAVE Alerts, enrollment is simple, and you can opt out at any time. The system allows you to receive text and email messages when emergency notifications are sent out by KUMC.
    b. Register for RAVE Alert via the Enroll & Pay system: Log in using the green KUMC campus login box, select "Emergency Contact Info" listed under the Main Menu, and follow the instructions.
2. An alert message will be posted on the KUMC website at www.kumc.edu.

<u>Attendance Requirements – Campus Closing</u>

1. Students ***do not*** attend classes when campus is closed. Students are excused from all classes. No academic consequence otherwise assigned to missed attendance is incurred.
2. Students in a clinical placement on the KUMC/TUKHS campus ***do not*** report to their assigned schedule when campus is closed.
3. Students in clinical placements outside the KUMC/TUKHS campus are required to follow the inclement weather guidelines of their assigned clinical site. If there is a question regarding attendance, students should contact their clinical site for expectations and follow their clinical site's guidelines.

Personal Appearance

A. Attire
   1. Students should be aware that clinical affiliates may choose to enforce a stricter code of dress and behavior. Students not conforming to these codes may not be accepted at the clinical site(s) and consequently, may jeopardize their continued enrollment and progress in the program.

   2. Denim jeans or skirts should not be worn at any time. Neat, clean, closed-toe shoes will be worn. Cloth shoes are not permitted for student's safety. Uniforms, laboratory coats, and shoes will be clean, neat, and in good condition at all times.

   3. Identification badges may be provided by each site. If identification badges are not provided, the student shall wear their KUMC identification badge. They are to be worn in plain view at all times while on the premises of the clinical site.

B. Personal Hygiene

   1. All students will bathe regularly and wear an effective deodorant. Strong aromatic scents should not be used. Conservative hair-style and reasonable fingernail length is required. All long hair will be pulled back and fastened. Students are expected to abide by regulations set by clinical sites regarding personal appearance criteria.

Professional Conduct

Students will conduct themselves in a professional manner at all times during the Clinical Practicum. Specific conduct codes as defined in each institution's policy manual will be adhered to while at the site. The student will be required to follow the Clinical Laboratory Science Program's Code of Ethics.

Code of Ethics for Clinical Laboratory Scientists Students

We, as students of Clinical Laboratory Sciences, will apply the following Code of Ethics to our actions toward patients, physicians, and hospital personnel in our clinical program and in our future work. This code will apply to our personal as well as professional attitudes and conduct.

As Professionals we will:

A. Assume a professional manner in attire and conduct
B. Establish a rapport with hospital staff, supervisors, and physicians
C. Hold in confidence information relating to patients
D. Strive for increased efficiency and quality through organization
E. Be willing to accept responsibility for our own work and results
F. Strive to learn the theories of laboratory determinations
G. Establish confidence of the patient through kindness and empathy

In Personal conduct we will:

A. Achieve the highest degree of honesty and integrity
B. Maintain adaptability in action and attitude
C. Establish a sense of fraternity among fellow students
D. Strive to have a pleasant manner in the laboratory and with the patients
E. Remember that we are University, as well as Clinical Laboratory Sciences students, therefore we should strive to be educated individuals outside our technical field.

Service Work Performed by Students

Service work is the compulsory, or non-compulsory, performance of any clinical duties during scheduled clinical rotation hours without direct supervision by a certified technologist. Students are prohibited from performing service work or substituting for (compensated or uncompensated) any regular qualified staff employee at the clinical affiliate during the scheduled clinical practicum rotation (approximately 8:00 AM – 5:00 PM Monday through Friday). Any duties performed by the students at the clinical site are under the supervision of an employee of the site and the employee is responsible for final verification of the data and releasing it to the LIS (laboratory information system). At each clinical affiliate site, students shall perform duties, and demonstrate procedural competencies, as established by the given clinical rotation objectives and under the supervision of a certified technologist.

Occasionally, a student chooses to be hired by a clinical site for jobs that do not require a certified MLS or MLT and the employment is outside the scheduled class hours (e.g., evenings or weekends). In such cases, the student is a *bona fide* employee of the site and the work is not considered to satisfy any part of the student's clinical practicum rotation.

Laboratory Information System / Hospital Information System

Each facility has established policies and procedures relating to use of its respective hospital and/or laboratory information computer system. This includes the use of passwords, keys, or code words and patient data entry. Students should adhere to the protocol as communicated by the Clinical Liaison. In some institutions, students are allowed the opportunity to learn the respective computer systems and report results under the direct supervision of the Clinical Instructor.

Medical Records and Patient Data

Students will receive KUMC HIPAA training, but each clinical site may administer HIPAA training at their discretion.

Malpractice Liability /Health and Accident Liability

See individual agreement between Department of CLS at the University of Kansas Medical Center and affiliate site. All students in the Clinical Laboratory Sciences program are covered by professional liability insurance.

Lines of Communication

Under most circumstances, the student should communicate directly with the Clinical Instructor. If not satisfied with the response, the student should approach the Clinical Liaison to discuss the situation. The Clinical Instructor should communicate with the student and then the Clinical Liaison, in that order, for routine concerns and/or problems pertaining to the student. The Laboratory Manager or Director should be approached only if a student's actions have compromised the professional policies of the laboratory or the safety or personnel and/or patients.

Any concern or problem(s) may be brought to the attention of the Department of Clinical Laboratory Sciences at the University of Kansas Medical Center after the student has followed the appropriate lines of communication.

Confidentiality

All patient and institutional information will be held in the strictest confidence at all times. The discussion of any patient information outside of the "classroom" 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 at the hospitals. Violation of this policy and/or of other hospital or laboratory policies may result in the dismissal of the student from the hospital and clinical practicum course(s).

Student Safety and Biohazard Training

The health and safety of students during clinical rotations must be safeguarded. To ensure that students are complying with the health and safety regulation at their clinical sites, students are to receive appropriate safety and biohazard training at each clinical site. Documentation of this training can include return of the orientation checklist, providing copies of the biohazard and safety training material that the student receives at the clinical site, or a copy of a certificate issued at completion of training.

Student Exposure Protocol

General Information

Students, if injured or exposed to (mucous membranes or open skin) blood, body fluids, or other infectious material via needle stick or splash while performing duties at an Outside Facility should:

A. Follow procedures consistent with the institution and report to nearest emergency room if applicable.
B. Student or supervisor calls Student Health (588-1941) and leaves a message regarding the incident (student name, date, and time). Fill out Student Incident Form.
C. A student health representative will work with the outside agency to assess risk factors and plan follow-up care.

The entire Student Exposure Protocol can be found at the following url:
http://www.kumc.edu/student-affairs/student-health-services/needle-stick-or-other-exposure.html

Academic and Grievance Policies

- Introduction*
- Academic Standards*
- Probation*
- Academic Misconduct*
- Non-Academic Misconduct*
- Guidelines for Circumstances . . .*
- Grievance Procedure*

**** See CLS Student Handbook***

Clinical Laboratory Sciences Department
University of Kansas Medical Center

On-Site Orientation Check List

Each clinical site will conduct an in-house orientation for KUMC CLS students.

Clinical Site Orientation	Date	Liaison Initials
Identification Badges		
Parking Assignments		
Lunch and Break Hours, and Policies		
Tours of the Facility and Laboratory		
Institutional and/or Departmental Policies, pertaining to the CLS student including service work.		
Facility, Laboratory, and Biohazard Safety		
Introductions to Clinical Instructors, Pathologists and Other Appropriate Laboratory Personnel		
Laboratory Information Management, including the review of policies and procedures relating to access codes/passwords, etc. on the LIS or HIS		
Policies and Procedures for Medical Records		

Methods of Evaluation

The student's knowledge, skills, and professional (affective) behavior will be assessed by written examinations/exercises, task performance, and observation by Clinical Instructors and/or Clinical Liaison during all practicums. The final grade for course will be determined by the scores earned in the categories as described below (See Grade Sheet).

A. Performance Tasks Checklist

These are the laboratory tasks and skills detailed for each rotation and unit. The student must demonstrate acceptable progress and performance of these tasks in order to receive a satisfactory grade in the course. Students will be evaluated by Clinical Instructors using the following standardized list: Does Not Meet Entry Level Competency, Meets Entry Level Competency, and Exceeds Entry Level Competency. Definitions for these are provided. See Performance Task Checklist.

B. Professional (Affective) Behavior

Whereas a student's performance in the practicum area comprises their technical skills and also their professional attributes such as communication skills, attendance, and interaction with multiple clinical site employees, the student's professional (affective) behavior will be assessed by the Clinical Instructors and Clinical Liaison. See Clinical Professional Evaluation.

C. Daily Journal

Each student must record their daily activities. This includes documentation of test names and approximate number either performed or observed, and a brief description of problem solving and trouble shooting incidents. Time of arrival and departure, special incidents, concerns, problems, and other pertinent items should also be recorded. The notes should be organized and legible. The daily journals must be submitted to the appropriate CLS faculty for each rotation via LMS.

D. Quizzes/Miscellaneous/Review Questions

The above items may be administered at the discretion of Clinical Instructors in each rotation at affiliate sites. If such items are administered, KUMC Department of CLS will include them in calculation of practicum grades. A grade report sheet is included in this handbook for use by Clinical Instructors in recording any scores assigned for such items.

E. Web Class

Each student is responsible for completion of the web class that accompanies each clinical rotation. The web course is designed to be completed concurrently with the practicum experience in each content area and not extended into the next rotation block.

Clinical Laboratory Sciences Department
University of Kansas Medical Center

Clinical Rotation/Practicum Grade Sheet
(to be completed by KUMC CLS Faculty)

Student Name:_____

Clinical Site:_____

CLS 639	Clinical Urinalysis
CLS 641	Clinical Chemistry and Immunology
CLS 643	Clinical Microbiology
CLS 645	Clinical Immunohematology
CLS 647	Clinical Hematology

1. Performance Tasks Checklist _____
2. Professional Evaluation Form _____
3. Daily Journal / Clinical Conference Participation _____
4. Miscellaneous

TOTAL SCORE _____

GRADE _____

Deadline of Document Submission

Daily Journals

The student will submit a weekly report of daily activities by 8:00 a.m. on Monday of the following week via LMS. Each journal entry should be clearly labeled by week and content area (e.g. Daily Journal Week of March 4 - 8, 2021: Clinical Chemistry). A penalty of 10% will be subtracted from that week's journal grade for each day the journal is late. Incremental deductions will be made as needed. Journals submitted more than 5 days late earn a grade of zero. The rubric used by the instructor to grade the journal entry is shown on the next page.

Professional (Affective) Behavior

Each student is required to have Clinical Instructors complete a Professional Evaluation Form and return it to KUMC CLS Faculty within one (1) week of completion of the rotation block.

Performance Task Checklists

Each rotation area has a specified list of skills and tasks. After completion of the rotation, these forms must be returned to the KUMC CLS Department no later than one (1) week after the final day of the rotation.

Instructions and Grading Rubric for CLS Practicum Journal Entries

The student will submit a weekly report of daily activities by 8:00 a.m. on Monday of the following week via Blackboard. Each journal entry should be clearly labeled by week (e.g. "Daily Journal Week of March 4 - 8, 2021: Clinical_____".

There are examples of GOOD, AVERAGE and, POOR quality journal entries in the content folder. Please review them prior to writing your first entry so you are aware of what is expected of your journal entries.

Write each day's journal entry as soon as possible after the day's work is complete. It is difficult to remember what you have done and assess your progress if you are waiting to write your entries.

Write thorough and thoughtful entries. Report what you did each day, note if it reflects what you learned in all the classes you have taken in the program. Note your feelings about the day – Were you overwhelmed? Is it making sense? Are you catching on? Did you have any "Aha" moments during the day? What might be different from what you were taught in student lab, etc. If applicable, mention workflow, organization of tasks, things that were unexpected, interesting cases, problems encountered and how they were solved, etc. Your journal should be interesting to read. It should reflect your enthusiasm and excitement for area of the lab and all the tasks you are now able to do "for real".

Reflect on each day's activities and the progress you feel you are making. Discuss connections you are making between the many areas of the clinical laboratory. You want your discussion to indicate reflection, have depth of thought, which includes critical thinking, analysis and synthesis.

Support your comments using examples from the day, from student lab, from readings, experiences, and other course-work taken throughout the program.

Use proper grammar and punctuation. Be sure you have spelled all words correctly, especially organism and test procedure names. Proofread your entry prior to submitting your work. Write at least one page per day for your journal (use 12-point font, single spaced lines).

Per the Student Clinical Rotation handbook, 10% (2.5 points) will be deducted from your weekly journal for each day it is late. Incremental deductions will be made as needed. Journals more than 5 days late earn a grade of zero.

Students should refer to the rubric to gain a better understanding of the purpose of the daily journal entries.

Criteria	4	3	2	1
Organization	Daily entry is well organized, follows the day's workflow.	Entry jumps around in terms of tasks performed.	Limited discussion of what was accomplished each day.	Little or no discussion of the day's activity.
Detail	Student indicates who they worked with each day. Lists and describes types of procedures and other bench activities performed. Notes unusual reactions or results that differ from expected.	Student indicates who they worked with each day. Lists and describe types of procedures and other bench activities performed.	Generalizes the number and descriptions of tasks performed.	No indication of what was done or how busy the student was during the day.
Reflection, Critical Thinking & Synthesis	Reflection, critical thinking and analysis are interspersed with the various activities discussed in the entry. Indicates if they had to research anything encountered during the day.	Reflection, critical thinking, and analysis are limited to one section of each day's entry (i.e. at the end).	Little indication of reflection, critical thinking or analysis in each day's entry.	No reflection, critical thinking or analysis described.
Integration of Knowledge	Journal includes more than one example, and at least one example is drawn from prior knowledge or outside resources, demonstrating your ability to connect course concepts with broader subjects.	Journal refers to at least one example from previous courses, assignments or readings that show integration of knowledge.	Journal shows integration of knowledge only from the student lab experience.	Journal shows no integration of prior knowledge from prerequisite classes.
Creativity	Journal contains many creative details and or descriptions that contribute to the reader's enjoyment.	Journal contains a few creative details and/or descriptions that contribute to the reader's enjoyment.	Creative details and/or descriptions distract from the journal.	Little evidence of creativity in the details or descriptions provided.
Grammar, Spelling, ect.	No grammar, spelling, or punctuation errors. Journal is very readable.	No more than 1 error/day. Easy to read.	A few errors found in each day's entry. Some statements difficult to understand or make sense of.	Shows no concern for accurate spelling, punctuation use, or sentence structure.

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Certification of Receipt

I do hereby acknowledge that I have received a copy of the current Clinical Laboratory Sciences Clinical Rotation/Practicum Handbook and that I have read and understood the content.

I have also been provided an opportunity to question the Clinical Laboratory Sciences Department Program Director or KUMC CLS Faculty about content that I do not understand, and I realize that failure to return this from prevents me from entering the practicum site.

_____ _____

Signature Date

Clinical Laboratory Sciences Department
University of Kansas Medical Center

Student Clinical Practicum Agreement
Spring / Fall 2021

In consideration for participating in a clinical rotation learning experience (hereinafter referred to as ROTATION) at any clinical facility (hereinafter referred to as the FACILITY) where I may be assigned, I hereby agree to the following:

1. To follow the administrative policies, standards and practices of the Facility when in the Facility.

2. To report to the Facility on time and to follow all established regulations of the Facility.

3. To keep in confidence all medical, health, financial and social information (including mental health) pertaining to particular client(s) or patients.

4. To not publish any material related to my Rotation that identifies or uses the name of the Facility unless I have received written permission from the Facility.

5. To comply with all federal, state and local laws regarding the use, possession, manufacture or distribution of alcohol and controlled substances.

6. To follow Centers for Disease Control and Prevention (CDC) Universal Precautions for Bloodborne Pathogens, CDC Guidelines for Tuberculosis Infection Control, and Occupational Safety and Health Administration (OSHA) Respiratory Protection Standard.

7. To arrange for and be solely responsible for my living accommodations while at the Facility.

8. To provide the necessary and appropriate uniforms and supplies required where not provided by the Facility.

9. To wear a name tag that clearly identifies me as a student. Further, I understand and agree, otherwise in writing, that I will not receive any monetary compensation from the Facility for any services that I provide to the Facility or its clients, students, faculty or staff as a part of my Rotation.

Unless otherwise agreed upon in writing, I understand and agree that I shall not be deemed to be employed by or an agent of the Facility; that the Facility assumes no responsibilities as to me as may be imposed upon an employer under any law, regulation or ordinance; that I am not entitled to any benefits available to employees; and therefore, I agree not to in any way, hold myself out as an employee of the Facility.

I understand and agree that I may be immediately withdrawn from the Rotation based upon a lack of competency on my part, my failure to comply with the rules and policies of the Facility, if I pose a direct threat to the health of safety of others or, for any other misconduct as outlines in the ***CLS Student Handbook***.

I understand that all medical or health care (emergency or otherwise) that I receive at the Facility will be my sole responsibility and expense.

I have read, or have had read to me, the above statements, and understand them as they apply to me. I hereby certify that I am eighteen (18) years of age or older; that I am legally competent to execute this Clinical Rotation Agreement; that I have read carefully and understand the above Clinical Rotation Agreement; and that I have freely and voluntarily signed this "Clinical Rotation Agreement".

STUDENT:

_____ _____

Signature Date

_____ _____

Printed Name Date

FACULTY:

_____ _____

Signature Date

_____

Printed Name

CLS Clinical Professional Evaluation

It is our goal to endure that students entering the clinical laboratory sciences profession do so with comprehension of behavioral standards expected. For each of the areas below, please indicate the percentage of time the student exhibits the listed behavior. Please provide a rating from 100% - 0%, with 100% indicating that the student exhibits the behavior 100% of the time, and 0% indicating the student exhibits the behavior 0% of the time. If your experience with a student did not provide you with a basis to evaluate in a specific area, please indicate N/A.

Student: _____

Date: _____

Rotation discipline):
- ○ Blood Bank
- ○ Chemistry and Immunology
- ○ Microbiology
- ○ Urinalysis

Institution:
- ○ Children's Mercy Hospital
- ○ Heartland Regional Health Center
- ○ Lawrence Memorial Hospital
- ○ Liberty Hospital
- ○ Olathe Medical Center
- ○ Physicians Reference Laboratory
- ○ Quest Diagnostics
- ○ Shawnee Mission Medical Center
- ○ St. Joseph Medical Center
- ○ Truman medical Center
- ○ University of Kansas Hospital
- ○ VA Medical Center – Kansas City

For each of the areas below, please indicate the percentage of time the student exhibits the listed behavior. Please provide a rating from 100% - 0% indicating that the student exhibits the behavior 100% of the time, and 0% indicating the student exhibits the behavior 0% of the time. If your experience with a student did not provide you with a basis to evaluate in a specific area, please indicate N/A.

Initiative & Interest

	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	N/A
Actively participates in performing assigned tasks	○	○	○	○	○	○	○	○	○	○	○
Follows instructions and asks Appropriate questions	○	○	○	○	○	○	○	○	○	○	○
Prepared for the day's Laboratory assignment	○	○	○	○	○	○	○	○	○	○	○
Self-starter in appropriate Situations	○	○	○	○	○	○	○	○	○	○	○

Responsibility

	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	N/A
Complies with institutional policies and procedures	○	○	○	○	○	○	○	○	○	○	○

Adaptability

	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	N/A
Is accountable for assigned work	○	○	○	○	○	○	○	○	○	○	○
Recognizes limitation, seeking help when needed	○	○	○	○	○	○	○	○	○	○	○
Accepts constructive criticism and modifies behavior	○	○	○	○	○	○	○	○	○	○	○
Adjusts workflow appropriately in emergency situations	○	○	○	○	○	○	○	○	○	○	○
Adapts site-specific protocols to generic tasks	○	○	○	○	○	○	○	○	○	○	○
Adjusts to unplanned changes in schedule or assignment	○	○	○	○	○	○	○	○	○	○	○

Knowledge

	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	N/A
Demonstrates understanding of basic theory	○	○	○	○	○	○	○	○	○	○	○
Demonstrates understanding of medical significance of testing results	○	○	○	○	○	○	○	○	○	○	○
Integrates knowledge gained prior to the practicum to its application within the clinical rotation	○	○	○	○	○	○	○	○	○	○	○
Identifies problems, errors, or malfunctions (at entry level)	○	○	○	○	○	○	○	○	○	○	○
Creatively addresses problems that have no standard solution or approach	○	○	○	○	○	○	○	○	○	○	○

Technique

	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	N/A
Applies theoretical principles to current task	○	○	○	○	○	○	○	○	○	○	○
Completes assigned tasks within an acceptable timeframe	○	○	○	○	○	○	○	○	○	○	○
Requires minimal supervision	○	○	○	○	○	○	○	○	○	○	○
Reports accurately and efficiently	○	○	○	○	○	○	○	○	○	○	○
Demonstrates appropriate trouble-shooting skills (entry level)	○	○	○	○	○	○	○	○	○	○	○

Professional Standards

	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	N/A
Arrives at assigned time and remains until work is completed	○	○	○	○	○	○	○	○	○	○	○
Complies with institutional safety policies and procedures	○	○	○	○	○	○	○	○	○	○	○
Maintains patient confidentiality as directed by HIPAA	○	○	○	○	○	○	○	○	○	○	○
Maintains a clean and orderly work area	○	○	○	○	○	○	○	○	○	○	○
Presents a professional appearance	○	○	○	○	○	○	○	○	○	○	○
Promotes a cordial work atmosphere, treating others with courtesy and respect	○	○	○	○	○	○	○	○	○	○	○
Demonstrates integrity – admitting mistakes and taking corrective measures	○	○	○	○	○	○	○	○	○	○	○

Overall Performance Summary

○100% ○90% ○80% ○70% ○60% ○50% ○40% ○30% ○20% ○10% ○N/A

Would you hire this person for an open position in your laboratory if you had the authority to do so?

If you or your family were a patient I this facility, how would you feel about having this individual perform your laboratory testing (assume completion of standard new-employee competency assessment as conducted in your lab)?

General Comments:

Your Name:_____

Your Title:_____

Urinalysis Clinical Practicum Objectives – CLS 639

The following objectives are to be completed by the student for successful completion of this clinical rotation. The objectives within the psychomotor domain will be achieved by practice and evaluated through demonstration by the student. The objectives within the cognitive domain will be obtained through readings and evaluated through written exams.

The Student Is Expected To:

1. Explain to a patient the proper method of collecting a midstream urine.
2. Demonstrate ability to correctly log in urine specimens.
3. Perform chemical urinalysis procedures.
4. Identify those situations in which confirmatory tests are required and perform the appropriate test. (Clinitest, Ictotest, and sulfosalicylic acid test for protein, Acetest).
5. For the following tests:

specific gravity	pH
appearance	protein
glucose	ketones
hemoglobin	bilirubin
urobilinogen	Ictotest
Clinitest	SSA
Acetest	

   5a – state the principle.
   5b – state the normal value.
   5c – list 2 conditions that could result in abnormal values.
   5d – list causes of false positive and false negative results for each.

6. Describe the changes which occur in urine upon standing.
7. Define the following terms:

oliguria	polyuria
distal and proximal tubule	loop of Henle
osmolality	collecting tubule
renal glycosuria	diuresis
nephron	nocturia
glomerulus	isosthenuria
ketone bodies	

8. Correlate the Clinitest glucose results with the dipstick glucose results.
9. Discuss the reasons that Clinitest is routinely performed on all children under five.
10. Correlate the effect of various substances on urine appearance. These substances include RBC's, WBC's, bile, melanin, porphyrins, myoglobin, amorphous crystals, drugs, and homogentisic acid.
11. Discuss the four main functions of the kidney.
12. Correctly perform the quality control procedures used in the urinalysis department.
13. Define the following:

serotonin	melanin
alkaptonuria	phenylketonuria
myoglobin	Bence Jones Protein

14. Perform maintenance on urinalyses instruments.
15. Identify elements found in urinary sediments from sediment, descriptions, and images:

white blood cells	amorphous phosphates
red blood cells	amorphous urates
glitter cells	calcium oxalate crystals
epithelial cells	uric acid crystals
mucous	triple phosphate crystals
oval fat bodies	tyrosine crystals
fat droplets	leucine crystals
waxy casts	cysteine crystals
hyaline casts	cholesterol crystals
granular casts	sulfa crystals
WBC casts	ammonium biurate crystals
cylindroids or pseudocasts	yeast
sperm	trichomonas

16. Correlate conditions associated with the structures in the above objective.
17. Describe the formation of all cast types.
18. Report UA results as per laboratory protocol.
19. Describe or demonstrate our method for reporting each of the formed elements in the urine.
20. Correlate the clinical picture and the urinary findings in the following diseases:

lupus erythematosus	multiple myeloma
glomerulonephritis	pyelonephritis
diabetes mellitus	Addison's disease
Cushing's syndrome	diabetes insipidus
renal failure	

21. When given a problem/issue in UA, resolve the problem.
22. Perform complete UAs and correlate microscopic with chemistry results.

Clinical Urinalysis Practicum –CLS 639
Performance Tasks Checklist

Note: This checklist contains a number of Urinalysis tests that may not necessarily be performed in the department at your clinical site or may be performed in another department. The CLS student will perform assigned tests that may or may not be included in this list. However, the student is responsible for applying the objectives to each of the tests listed below and any additional assigned by the site. Performing truly independently at all tasks may not be achievable at this stage, but with supervision the student should be able to perform most tasks with minimal oversight.

Please evaluate the student using the following scale:

1. Exceeds Standards (100%): Consistently exceeds entry level expectations. Student demonstrates exceptional initiative and independent functioning. Can perform tasks independently.

2. Above Standards (90%): Consistent in meeting entry-level expectations. Student performance demonstrates initiative and independent functioning. Student may excel in some areas.

3. Meets Standards (80%): Consistent in meeting entry-level expectations. Can perform procedures with supervision.

4. Below Standards (70%): Performance is marginally below entry-level expectations. Student needs to improve to achieve entry-level competencies.

5. Fails to Meet Standards (60%): Performance is significantly below entry-level expectations. Performance is unacceptable. Needs continuous monitoring and supervision.

N/A: Not applicable. No opportunity to evaluate criteria. Please mark "NA" across the rating scale if there has been inadequate opportunity to evaluate an attribute.

Student Name:_____

Clinical Site:_____

Performance Task

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Identification of specimen	○	○	○	○	○	○
Specimen acceptability	○	○	○	○	○	○
Specimen preparation	○	○	○	○	○	○
Performance of routine dipstick / automated	○	○	○	○	○	○
Performance of routine dipstick / manual	○	○	○	○	○	○
Performance of Clinitest	○	○	○	○	○	○
Performance if Ictotest	○	○	○	○	○	○
Performance of Acetest	○	○	○	○	○	○
Performance of Sulfosal. Protein	○	○	○	○	○	○
Use and care of Refractometer	○	○	○	○	○	○
Microscopically recognize and quantitate leukocytes	○	○	○	○	○	○
Microscopically recognize and quantitate erythrocytes	○	○	○	○	○	○
Microscopically recognize and quantitate epithelial cells	○	○	○	○	○	○
Microscopically recognize and quantitate casts	○	○	○	○	○	○
Microscopically recognize and quantitate crystals	○	○	○	○	○	○
Able to troubleshoot discrepancies	○	○	○	○	○	○
Follow safe work practice (universal precautions)	○	○	○	○	○	○
Performs QC procedures	○	○	○	○	○	○
Recognizes critical values	○	○	○	○	○	○
Turnaround time protocol – can perform UA within the labs turnaround time	○	○	○	○	○	○
Review of results for accuracy	○	○	○	○	○	○
Recognizes abnormal and absurd results and takes appropriate action	○	○	○	○	○	○
Keeps work area clean, organized, and stocked with supplies	○	○	○	○	○	○
Correlates microscopic with chemical analysis	○	○	○	○	○	○

Other skills not specifically listed above related to the analysis of urine

Other skill:____

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Other skill:____

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Other skill:____

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Other skill:____

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Other skill:____

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Other skill:____

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Additional Comments:

Clinical Instructor:_____

Date:_____

Clinical Chemistry & Immunology
Practicum Objectives – CLS 641

The following objectives are to be completed by the student for successful completion of this clinical rotation. The objectives within the psychomotor domain will be achieved by practice and evaluated through demonstration by the student. The objectives within the cognitive domain will be obtained through readings and evaluated through written exams.

Upon completion of the clinical practicum, the student should be able to:

Core Knowledge and Skills, (should be review of previously learned material and skills that do not need to be re-taught, just monitored).

1. Demonstrate accurate and precise pipetting technique using all available types of pipettes
2. Correctly calculate and perform serial and discrete dilutions
3. Recognize and perform corrective action when abnormal or absurd results occur
4. Maintain a clean work area
5. Apply all safety procedures at all times
6. Demonstrates correct usage and care of laboratory equipment and supplies

Specimen Acceptability, Processing and Handling

1. Demonstrate knowledge of departmental specimen handling – separate serum or plasma. Apply criteria for rejection of specimens and the reason for rejection. Apply methods for stabilizing or preserving specimens

Quality Assurance and Quality Control

1. Prepare control material and reagents per laboratory protocol
2. Perform calibration and QC procedures for all instruments or analytes per laboratory policy
3. Recognize out of control results using Westgard rules and take the appropriate corrective action
4. State possible causes for out of control results for each test
5. Perform and/or describe maintenance of any instruments used in this area and document appropriately

Automated Assay Methods/Instruments

1. Discuss the theories/principles of operation of the instrumentation and/or assay performed during this rotation
2. For all immunological assays, identify the antigen/antibody or other substances involved and whether the assay detects antigen or antibody in the patient specimen.
3. For all non-immunological assays describe the analytical methodology used to detect the analyte
4. Perform analyses using the various instrumentation under the supervision of the clinical instructor/liaison
5. Perform manual procedures under the supervision of the clinical instructor/liaison
6. Observe basic LIS computer applications where relevant

Post-Analytical

1. Recognize and report critical results to the appropriate person and documenting the interaction
2. Store and maintain paper worksheets and other documentation in the appropriate location

Clinical Chemistry & Immunology (Serology)
Practicum – CLS 641
Performance Tasks Checklist

Note: This checklist contains a number of Chemistry and Immunology (Serology) tests that may not necessarily be performed in the department at your clinical site or may be performed in another department. The CLS student will perform assigned tests that may or may not be included in this list. However, the student is responsible for applying the objectives to each of the tests listed below and any additional assigned by the site. Performing truly independently at all tasks may not be achievable at this stage, but with supervision the student should be able to perform most tasks with minimal oversight.

Please evaluate the student using the following scale:

1. Exceeds Standards (100%): Consistently exceeds entry level expectations. Student demonstrates exceptional initiative and independent functioning. Can perform tasks independently.

2. Above Standards (90%): Consistent in meeting entry-level expectations. Student performance demonstrates initiative and independent functioning. Student may excel in some areas.

3. Meets Standards (80%): Consistent in meeting entry-level expectations. Can perform procedures with supervision.

4. Below Standards (70%): Performance is marginally below entry-level expectations. Student needs to improve to achieve entry level competencies.

5. Fails to Meet Standards (60%): Performance is significantly below entry-level expectations. Performance is unacceptable. Needs continuous monitoring and supervision.

N/A: Not applicable. No opportunity to evaluate criteria. Please mark "NA" across the rating scale if there has been inadequate opportunity to evaluate an attribute.

Student:_____

Institution:_____

Pre-Analytical

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Identification of specimen	○	○	○	○	○	○
Specimen integrity and handling	○	○	○	○	○	○
Lipemic specimen	○	○	○	○	○	○
Hemolyzed specimen/	○	○	○	○	○	○
Central line draw	○	○	○	○	○	○
Correct tube collected	○	○	○	○	○	○

Analytical

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Daily maintenance	○	○	○	○	○	○
Calibration protocol	○	○	○	○	○	○
Reagent preparation	○	○	○	○	○	○
Dilution protocol – Manual dilutions	○	○	○	○	○	○
Dilution protocol – Auto dilutions	○	○	○	○	○	○
Basic troubleshooting	○	○	○	○	○	○
Component replacement	○	○	○	○	○	○
Quality control	○	○	○	○	○	○
Reagent inventory control	○	○	○	○	○	○
Load specimens	○	○	○	○	○	○
Identify instrument malfunction	○	○	○	○	○	○

Automated Analyses

Performs patient sample analysis on the following instruments on in different testing areas: List the instrument used and/or individual test performed.

Instrument used and/or individual test performed:_____

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Instrument used and/or individual test performed:_____

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Automated Analyses *continued*

Instrument used and/or individual test performed:____

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Instrument used and/or individual test performed:____

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Instrument used and/or individual test performed:____

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Instrument used and/or individual test performed:__________

- ○ Exceeds Standards (100%)
- ○ Above Standards (90%)
- ○ Meets Standards (80%)
- ○ Below Standards (70%)
- ○ Fails to Meet Standards (60%)
- ○ N/A

Immunology Manual Analyses

Performs patient sample analysis using the following manual tests:

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Strep tests / ASO / DNaseB	○	○	○	○	○	○
Mono	○	○	○	○	○	○
RF/RA	○	○	○	○	○	○
RPR	○	○	○	○	○	○
ANA	○	○	○	○	○	○
Viral Serologies	○	○	○	○	○	○

Post-Analytical

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Reportable ranges	○	○	○	○	○	○
Documentation of critical results	○	○	○	○	○	○
Compares present to previous results – Delta checks	○	○	○	○	○	○
Recognize abnormal results and Takes appropriate action	○	○	○	○	○	○

Additional Comments:

Clinical Instructor:_____

Date:_____

Microbiology Clinical Practicum Objectives – CLS 643

Based on your practicum location, you may or may not have the opportunity to perform all the functions in mycobacteriology, parasitology, and mycology.

The following objectives are to be completed by the student for successful completion of this clinical rotation. The objectives within the psychomotor domain will be achieved by practice and evaluated through demonstration by the student. The objectives within the cognitive domain will be obtained through readings and evaluated through written exams.

1. Select the appropriate organisms for evaluation of reactivity of media, commercial kits, and reagents.
2. Evaluate the results of quality control testing and states the media, kit, or reagents that can be placed into service. Determine the appropriate action to take if results are not acceptable.
3. Operate, maintain, and perform Quality Assurance procedures on the automated blood culture instrument according to established protocol.
4. Select and set-up the appropriate atmospheric conditions for anaerobes and Campylobacter.
5. Based on the source of a culture, determine if the culture is acceptable. If not, determine the appropriate action to take including documentation procedures.
6. For specimens deemed acceptable, select the appropriate media, determine if a gram stain is indicated, process the specimen appropriately based on source, inoculate the plates, streak for isolated colonies, and select the correct incubation conditions.
7. Perform and interpret gram stains from clinical specimens and from isolated colonies.
8. Recognize the normal flora of the upper and lower respiratory tract, skin/wound, urogenital tract, and stool in routine cultures.
9. Recognize organisms that are pathogenic or potentially pathogenic from routine cultures and determine the identification procedures necessary to identify these organisms.
10. Perform presumptive and definitive identification tests on possible pathogens isolated from routine clinical cultures.
11. Determine when susceptibility testing is required based on the organism isolated and select the susceptibility procedure most appropriate for that organism.
12. Perform and interpret MICs, Kirby Bauer, E-Test, ESBL screens, and/or D Test susceptibility procedures.
13. Following the procedure manual, operate an automated identification and susceptibility instrument and an automated blood culture instrument.
14. Determine the appropriate work-up of an organism from a positive blood culture based on the initial gram stain result.
15. Process specimens for mycobacterial cultures, evaluating specimen acceptability and determining the need for decontamination and concentration, following the lab's protocol.
16. Perform Acid Fast Stains from clinical specimens.
17. Observe the use of DNA technology in the identification of common mycobacterial isolates.
18. Perform and interpret the results of rapid EIA, kits for the determination of various human pathogens (ex: Cryptosporidium, Giardia, C. difficle, Rotavirus, Influenza, etc.).
19. Perform concentration procedures on stool specimens as required for the detection of Ova and Parasites.
20. Process specimens for fungal culture, evaluating specimen acceptability and determining the need for any special processing of the specimen prior to culture.
21. Interpret the growth on fungal culture differentiating yeasts from filamentous moulds.
22. Perform and interpret yeast identification as per the protocol of the clinical site.
23. Perform and interpret slide cultures, tease preps, or scotch tape preps to identify commonly recovered filamentous moulds to at least genus level.
24. Recognized abnormal, unusual, and/or unexpected results during the performance of diagnostic testing in microbiology.
25. Following procedures, record and report patient results as required by your supervising CLS.

Clinical Microbiology III Practicum - CLS 643
Performance Tasks Checklist

Note: This checklist contains a number of Microbiology tests that may not necessarily be performed in the department at your clinical site or may be performed in another department. The CLS student will perform assigned tests that may or may not be included in this list. However, the student is responsible for applying the objectives to each of the tests listed below and any additional assigned by the site. Performing truly independently at all tasks may not be achievable at this stage, but with supervision the student should be able to perform most tasks with minimal oversight.

Please evaluate the student using the following scale:

1. Exceeds Standards (100%): Consistently exceeds entry level expectations. Student demonstrates exceptional initiative and independent functioning. Can perform tasks independently.

2. Above Standards (90%): Consistent in meeting entry-level expectations. Student performance demonstrates initiative and independent functioning. Student may excel in some areas.

3. Meets Standards (80%): Consistent in meeting entry-level expectations. Can perform procedures with supervision.

4. Below Standards (70%): Performance is marginally below entry-level expectations. Student needs to improve to achieve entry-level competencies.

5. Fails to Meet Standards (60%): Performance is significantly below entry-level expectations. Performance is unacceptable. Needs continuous monitoring and supervision.

N/A: Not applicable. No opportunity to evaluate criteria. Please mark "NA" across the rating scale if there has been inadequate opportunity to evaluate an attribute.

Student Name:_____

Clinical Site:_____

Blood Cultures

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Logs in specimens according to procedure	○	○	○	○	○	○
Correctly loads bottles onto instrument	○	○	○	○	○	○
Performs and interprets gram Stains of positive bottles and subcultures to the appropriate media	○	○	○	○	○	○
Notifies appropriate person with positive results using correct protocol	○	○	○	○	○	○
Performs blood culture instrument maintenance and quality assurance as required	○	○	○	○	○	○
Works in an organized and efficient manner for an entry level CLS	○	○	○	○	○	○

Culture Set-Up

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Identifies unacceptable specimens and take the appropriate action	○	○	○	○	○	○
Selects the correct media For the specimen source	○	○	○	○	○	○
Properly labels media and slides	○	○	○	○	○	○
Operates the bio-safety cabinet correctly	○	○	○	○	○	○
Inoculates specimen onto media Streaks plates so that isolated Colonies are obtained	○	○	○	○	○	○
Correctly plates urine Specimens using a calibrated loop	○	○	○	○	○	○
Correctly processes tissues Using a tissue grinder or other Appropriate method	○	○	○	○	○	○
Selects appropriate incubation conditions	○	○	○	○	○	○
Sets up anaerobic jars, Campy/anaerobic bags, etc. and Achieves the expected atmosphere	○	○	○	○	○	○

Culture Set-Up *continued . . .*

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Prepares gram stain slides from clinical specimens	○	○	○	○	○	○
Stains gram stains following the procedure	○	○	○	○	○	○
Screens sputum gram stains and rejects unacceptable specimens	○	○	○	○	○	○
Correctly interprets and Reports gram stains based On the lab's procedure	○	○	○	○	○	○
Performs various rapid EIA tests and correctly interprets the results. (H. pylori, Rotavirus, RSV, Influenza, C.diff, Etc.)	○	○	○	○	○	○
Performs and interprets Fecal Leukocyte exams	○	○	○	○	○	○

Anaerobic Organisms

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Recognizes Organisms that should be checked for aerotolerance	○	○	○	○	○	○
Performs aerotolerance testing	○	○	○	○	○	○
Set-up of RapID system for Anaerobes or other commercial ID kit	○	○	○	○	○	○
Interpretation of ID system results for anaerobes	○	○	○	○	○	○
Works in an organized and efficient manner for an entry level CLS	○	○	○	○	○	○

Culture Interpretation

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Recognizes normal flora in upper respiratory cultures	○	○	○	○	○	○
Recognizes beta hemolytic strep in throat cultures	○	○	○	○	○	○
Recognizes S. pneumoniae and H. influenza in respiratory cultures	○	○	○	○	○	○
Correctly performs colony counts on urine cultures	○	○	○	○	○	○

Culture Interpretation *continued*

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Recognizes normal stool flora	○	○	○	○	○	○
Recognizes colonies on stool cultures that need to be Screened as enteric pathogens (S&S, EHEC, Yersinia, Campy)	○	○	○	○	○	○
Correctly interprets screening tests from suspected colonies from stool cultures	○	○	○	○	○	○
Recognizes normal sin flora in wound cultures	○	○	○	○	○	○
Recognizes potential pathogens in wound cultures and performs appropriate follow-up testing	○	○	○	○	○	○
Able to correctly perform rapid tests such as catalase, oxidase, spot indole, bile solubility	○	○	○	○	○	○
Ability to perform rapid tests Such as PYR, catarrhalis disk, Beta-lactamase test, Bacti-staph, Micro-ID, etc.	○	○	○	○	○	○
Able to perform strep typing On beta streps	○	○	○	○	○	○
Able to perform other overnight, non-automated tests such as optochin	○	○	○	○	○	○
Able to set-up Remel RapID systems and/or other commercial ID systems	○	○	○	○	○	○
Ability to set-up tests on an automated system (Phoenix, Vitek, Microscan or other instrument)	○	○	○	○	○	○

Mycology

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Recognizes when a yeast or mould is present on a fungal culture	○	○	○	○	○	○
Can perform screening tests For different species of yeast (Candida albicans screen, Germ tube, trehalose, etc.)	○	○	○	○	○	○
Preparation of slide cultures, tease preps, or scotch tape preps.	○	○	○	○	○	○

Mycology *continued* :

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Examine preps of filamentous moulds and can identify to at least genus level	○	○	○	○	○	○
Follows safety protocols for the mycology lab	○	○	○	○	○	○

Susceptibility Testing

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Performs Kirby Bauer disk susceptibility tests	○	○	○	○	○	○
Able to interpret KB disk susceptibility tests	○	○	○	○	○	○
Abe to set-up and interpret E-tests	○	○	○	○	○	○
Recognizes when confirmatory testing needs to be done for MRSA, ESBLs, AmpC, Carbapenamases	○	○	○	○	○	○
Correctly sets-up confirmatory tests as indicated	○	○	○	○	○	○
Works in an organized and efficient manner for an entry level CLS	○	○	○	○	○	○
Selects appropriate organisms for the performance of Quality Control Testing	○	○	○	○	○	○
Performs quality control testing as required by the lab's policies	○	○	○	○	○	○

Parasitology

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Preserve stool samples for O&P exams following the lab's procedures	○	○	○	○	○	○
Perform and interpret wet mounts for T. vaginalis	○	○	○	○	○	○
Perform stains (modified) Acid Fast or fluorescent) for Cryptosporidium	○	○	○	○	○	○
Performs concentration techniques on stool for the detection of ova and parasites	○	○	○	○	○	○

Parasitology *continued:*

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Performs various rapid EIA tests and correctly interprets the results (Crypto/Giardia; E. histolytica	○	○	○	○	○	○
Prepares and performs Trichome or other permanent stain for parasites	○	○	○	○	○	○
Examines wet and permanent smears to find and identify parasites	○	○	○	○	○	○
Examines Thin Blood smears to find and identify blood -parasites	○	○	○	○	○	○

Mycobacteria

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Performs sputum digestion procedure	○	○	○	○	○	○
Performs Acid Fast stains	○	○	○	○	○	○
Follows proper protocol for handling positive bottles from the Bac-T Alert TB or other automated AFB instrument	○	○	○	○	○	○
Works in an organized and efficient manner for an entry level CLS	○	○	○	○	○	○
Follows safety protocols for The mycobacteriology lab	○	○	○	○	○	○

Additional Comments:

Clinical Instructor:_____

Date:_____

Immunohematology Practicum Objectives – 645

The following objectives are to be completed by the student for successful completion of this clinical rotation. The objectives within the psychomotor domain will be achieved by practice and evaluated through demonstration by the student. The objectives within the cognitive domain will be obtained through readings and evaluated through written exams.

Upon completion of the clinical practicum and as applicable to the affiliate blood bank, the student will be able to:

Specimen Acceptability, Processing and Handling

1. Identify the types of blood samples and collection tubes appropriate for routine testing in the blood bank.
2. Determine the acceptability of a sample for compatibility testing based on sample age, compliance with labeling criteria and appearance as defined by institutional policy and AABB standards.
3. Identify procedures for storage of patient samples, including length of time and location.

Quality Assurance and Control

1. Identify quality assurance procedures in blood bank, including those performed daily, monthly, quarterly, bi-annually and annually (to include all storage devices, reagents, instruments, irradiators as may be present in the affiliate laboratory).
2. Identify the accrediting and inspection agencies that monitor blood banks/transfusion services and donor centers.

Routine Techniques and Procedures

1. Prepare appropriate cell suspensions as may be required by the affiliate institution for tube (3-5%) or gel testing (0.8%).
2. Grade and interpret macroscopic and microscopic (following institutional policy) agglutination reactions.
3. Demonstrate ability to appropriately prioritize tasks, report results and complete required documentation, using techniques that minimize error.
4. Verify patients meet laboratory defined audit criteria (when applicable) for approval of component therapy.

ABO/Rh Testing Procedures

1. Interpret the results of ABO/Rh testing without error.
2. Perform weak D testing on designated samples.
3. Identify ABO discrepancies and identify or perform appropriate procedures to resolve for the following:
    a. mixed field agglutination
    b. subgroups of A
    c. hypogammaglobulinemia
    d. rouleaux
    e. cold reacting alloantibody
    f. cold reacting autoantibody

Antibody Screen, Antibody Identification, Direct Antiglobulin Testing

1. Correctly describe the principle, perform, and interpret antibody screening tests using methodology designated by the affiliate:
    a. tube agglutination
    b. gel
    c. solid phase
2. Identify sources of false negatives and false positives in antiglobulin testing.
3. Perform and evaluate the results of an antibody identification panel, including special antigen testing and identify the antibody or antibodies present in the sample, including demonstration of knowledge of the serologic characteristics or antibodies to the following blood group systems:
    a. Rh
    b. Kell
    c. Kidd
    d. Duffy
    e. MNSs
    f. Lewis
    g. Lutheran
    h. I
    i. P
4. Describe the appropriate application (purpose and principle) of the following techiques to assist in antibody screening and identification.
    a. enhancement media (LISS, PEG)
    b. enzymes
    c. elution
    d. saline replacement
    e. adsorption (cold/warm)
    f. neutralization
    g. pre-warming technique
5. Perform Direct Antiglobulin Testing and describe its application and interpretation with respect to HDN, Hemolytic Transfusion Reaction and autoimmune Hemolytic Anemia.

Compatibility Testing

1. Identify/perform the steps involved compatibility testing using different techniques (IS, AHG, Gel, Pre-warm, Abbreviated or Electronic XM), including check of previous records.
2. Perform and interpret results for compatibility testing and explain possible causes of incompatible crossmatches. Discuss or perform procedures to resolve incompatible cross match results.
3. Select the most appropriate donor units to crossmatch with a recipient when ABO/Rh specific are unavailable and/or when patient presents with:
    a. single or multiple alloantibodies
    b. autoantibodies
    c. allo and autoantibodies
4. Perform or describe the laboratory investigative studies to be used for a suspected transfusion reaction, stating the purpose of each procedure.
5. Identify situation, procedures and consequences for switching between ABO/Rh specific, ABO/Rh compatible and Rh incompatible donor products.

Prenatal Testing, Hemolytic Disease of the Newborn and Rhlg Administration

1. Distinguish between ABO and Rh-related hemolytic disease of the newborn according to clinical and serological presentation.
2. Perform and interpret prenatal testing for mothers and postnatal testing for mothers and babies.
3. Perform and demonstrate knowledge of the principles and applications of testing need for administration of Rhlg including candidate selection, fetal screen and testing (KB) for dosage of Rhlg.
4. Identify and describe significance of other assays (perhaps performed by other departments) used to monitor HDN.
5. Describe criteria for treatment of a fetus/newborn including selection of blood and compatibility testing needed for exchange or intrauterine transfusion.

Component Preparation, Issue, and Inventory Management

1. Prepare and/or describe preparation, issue, pooling (where applicable), segregation, storage, shelf-life, relabeling and indications for use of the following components as applicable to both closed and "open" products:
    a. pRBCs
    b. FFP
    c. Platelets (random or pheresis)
    d. Cryoprecipitate
    e. Frozen RBCs
    f. Leukoreduced RBCs
    g. Irradiated RBCs
    h. Washed RBCs
    i. Rhlg
2. Describe the rational for review management of inventory and inspection of blood products.

Immunohematology Practicum – CLS 645
Performance Tasks Checklist

Note: This checklist contains a number of Immunohematology tests that may not necessarily be performed in the department at your clinical site or may be performed in another department. The CLS student will perform assigned tests that may or may not be included in this list. However, the student is responsible for applying the objectives to each of the test listed below and any additional assigned by the site. Performing truly independently at all tasks may not be achievable at this stage, but with supervision the student should be able to perform most tasks with minimal oversight.

Please evaluate the student using the following scale:

1. Exceeds Standards (100%): Consistently exceeds entry level expectations. Student demonstrates exceptional initiative and independent functioning. Can perform tasks independently.

2. Above Standards (90%): Consistent in meeting entry-level expectations. Student performance demonstrates initiative and independent functioning. Student may excel in some areas.

3. Meets Standards (80%): Consistent in meeting entry-level expectations. Can perform procedures with supervision.

4. Below Standards (70%): Performance is marginally below entry-level expectations. Student needs to improve to achieve entry-level competencies.

5. Fails to Meet Standards (60%): Performance is significantly below entry-level expectations. Performance is unacceptable. Needs continuous monitoring and supervision.

N/A: Not applicable. No opportunity to evaluate criteria. Please mark "NA" across the rating scale if there has been inadequate opportunity to evaluate an attribute.

Student Name:_____

Clinical Site:_____

Test methodologies used by student (Check all that apply): ☐ Tube Aggultination ☐ Gel ☐ Solid Phase

BB Testing Protocols

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
ABO Typing - Reciepients	○	○	○	○	○	○
ABO Typing – Cord blood and infants < 4 months	○	○	○	○	○	○
ABO Typing – Donor reconfirmation	○	○	○	○	○	○
ABO typing – Discrepancies	○	○	○	○	○	○
RH Typing – Weak D / cord blood	○	○	○	○	○	○
RH Typing – Problem D typing	○	○	○	○	○	○
RH Typing – Recipients	○	○	○	○	○	○
RH Typing – Donor reconfirmation	○	○	○	○	○	○
Antibody Screen and I.D. – Enzyme technique	○	○	○	○	○	○
Antibody Screen and I.D. – LISS	○	○	○	○	○	○
Antibody Screen and I.D. – PEG	○	○	○	○	○	○
Antibody Screen and I.D. – Elution	○	○	○	○	○	○
Antibody Screen and I.D. – Antibody titers	○	○	○	○	○	○
Special Antigen Testing – Recipients	○	○	○	○	○	○
Special Antigen Testing – Donors	○	○	○	○	○	○
Direct Antiglobulin Test – Full (poly and monospecific)	○	○	○	○	○	○
Direct Antiglobulin Test – IgG only	○	○	○	○	○	○
Crossmatch – Full (antiglobulin phase)	○	○	○	○	○	○
Crossmatch – Abbreviated or electronic	○	○	○	○	○	○
Fetal Screen	○	○	○	○	○	○
Transfusion Reaction Investigation	○	○	○	○	○	○
QC	○	○	○	○	○	○
History / Records Check	○	○	○	○	○	○

Comments on BB testing protocols:

Component receipt, processing, preparation, labeling and issue

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Receives, documents, and processes components from donor services	○	○	○	○	○	○
pRBC: select, label, visual inspect and issue	○	○	○	○	○	○
FB and FFP: select, thaw, label, Issue	○	○	○	○	○	○
Cryo: select, thaw, pool, label, Issue	○	○	○	○	○	○
Platelets: select, label, issue	○	○	○	○	○	○
Irradiation, label, issue	○	○	○	○	○	○
Prepare pediatric aliquots or syringes, label, issue	○	○	○	○	○	○
Rh Immune Globulin: label, issue	○	○	○	○	○	○
Platelets: select, label, issue	○	○	○	○	○	○

Comments on component tasks:

Work Habits

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Demonstrates techniques that minimize error (labeling, organization or test system handling reagents and patient samples, positive patient identification)	○	○	○	○	○	○
Appropriately and accurately document results and correction of results	○	○	○	○	○	○

Work Habits *continued*

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Demonstrates comprehension of basic blood banking concepts in decision-making, interpretation of results, and problem-solving	○	○	○	○	○	○
Verifies acceptability of patient samples and audit criteria, initiates appropriate follow-up if unacceptable	○	○	○	○	○	○
Verifies acceptance criteria for component therapy	○	○	○	○	○	○
Makes efficient use of time	○	○	○	○	○	○

Comments on work habits:

Please identify this student's area(s) of greatest strength.

Please identify this student's area(s) of greatest weakness or area(s) where greatest improvement is needed.

If you had a position in your transfusion service, and had the authority to hire, would you hire this student?

Name:_____

Title:_____

Date:_____

Hematology & Coagulation Practicum Objectives
CLS – 647

The following objectives are to be completed by the student for successful completion of this clinical rotation. The objectives within the psychomotor domain will be achieved by practice and evaluated through demonstration by the student. The objectives within the cognitive domain will be obtained through readings and evaluated through written exams.

Upon completion of the clinical practicum, the student should be able to:

Specimen Acceptability, Processing and Handling

1. Evaluate specimen for correct identification, labeling, appropriate anticoagulant, collection time.
2. Identify specimens that may be unsuitable for analysis due to lipemia, clots, insufficient quantify, etc.
3. Discuss corrective measures for unacceptable specimen.

Quality Assurance and Quality Control

1. Perform, document and evaluate quality control analysis in hematology and coagulation.
2. Discuss possible sources of error if control results are not within normal limits.
3. Discuss appropriate actions for unacceptable control values.
4. Perform or describe maintenance of hematology and coagulation analyzers.
5. Observe basic LIS computer applications where relevant.

Routine Procedures and Reporting of Results

1. Operate automated hematology and coagulation instrumentation with minimal supervision.
2. Perform non-automated hematology and coagulation testing with minimal supervision.
3. Recognize and interpret abnormal flags on automated instruments.
4. Recognize abnormal, critical, or discrepant results on CBC's, differentials and coagulation testing.
5. Identify corrective actions for abnormal automated results.
6. Differentiate between normal and abnormal histogram and/or scattergram patterns.
7. Explain the purpose, principle and methodology of the tests pertaining to the following subjects:
    a. blood cell counts (RBC, WBC, PLT)
    b. hemoglobin and hematocrit
    c. RBC indices
    d. WBC differential
    e. sedimentation rate
    f. reticulocyte count
    g. PT
    h. APTT
    i. fibrinogen
    j. D-dimer and FDP
    k. bleeding time
    l. thrombin time
    m. sickle cell screening and/or hemoglobin electrophoresis
    n. body fluid cell counts and cytospin differentials
8. For the tests listed in #7, correlate normal and abnormal values with disease states and other laboratory results.

9. Demonstrate proper technique in preparing peripheral blood smears for microscopic examination.
10. Evaluate peripheral blood smears for acceptable cellular distribution and staining.
11. Describe or perform:
    a. automated CBC with differential
    b. normal and abnormal differentials
    c. manual WBC counts if applicable
    d. reticulocyte counts
    e. sedimentation rates
    f. PT
    g. APTT
    h. fibrinogen
    i. D-dimer and/or FDP
    j. bleeding time
    k. thrombin time
    l. sickle cell screening and/or hemoglobin electrophoresis
    m. body fluid cell counts and cytospin differentials
12. Grade abnormal RBC morphology according to laboratory criteria.
13. Given a peripheral blood smear or image identify:
    a. stages of immature white blood cells
    b. abnormal RBC morphology
    c. WBC inclusions
    d. RBC inclusions
14. Demonstrate the ability to organize workflow.
15. Describe or demonstrate basic trouble-shooting skills.
16. Report values (routine, stat, critical) with supervision according to laboratory protocols.

Hematology Practicum – CLS 647
Performance Tasks Checklist

Note: This checklist contains a number of Hematology tests that may not necessarily be performed in the department at your clinical site or may be performed in another department. The CLS student will perform assigned tests that may or may not be included in this list. However, the student is responsible for applying the objectives to each of the tests listed below and any additional assigned by the site. Performing truly independently at all tasks may not be achievable at this stage, but with supervision the student should be able to perform most tasks with minimal oversight.

Please evaluate the student using the following scale:

1. Exceeds Standards (100%): Consistently exceeds entry level expectations. Student demonstrates exceptional initiative and independent functioning. Can perform tasks independently.

2. Above Standards (90%): Consistent in meeting entry-level expectations. Student performance demonstrates initiative and independent functioning. Student may excel in some areas.

3. Meets Standards (80%): Consistent in meeting entry-level expectations. Can perform procedures with supervision.

4. Below Standards (70%): Performance is marginally below entry-level expectations. Student needs to improve to achieve entry-level competencies.

5. Fails to Meet Standards (60%): Performance is significantly below entry-level expectations. Performance is unacceptable. Needs continuous monitoring and supervision.

N/A: Not applicable. No opportunity to evaluate criteria. Please mark "NA" across the rating scale if there has been inadequate opportunity to evaluate an attribute.

Student Name:_____

Clinical Site:_____

CBC – Read the procedure manual. Understand the principle of the analyzer operation.

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Assess heme specimen acceptability considering: procedure requirements, anticoagulant/blood ratios, clotted samples, labeling criteria	○	○	○	○	○	○
Perform automated CBC's using a multi-parameter instrument with minimal supervision for at least 5 morning runs	○	○	○	○	○	○
Run start-up, shut down and change reagents	○	○	○	○	○	○
Perform QC including documentation	○	○	○	○	○	○
Evaluate patient and control data for acceptability	○	○	○	○	○	○
Recognize and document error codes	○	○	○	○	○	○
Recognize when results may be incorrect, samples should be rerun, or sear / specimen checked before reporting	○	○	○	○	○	○
Recognize when corrective action is needed	○	○	○	○	○	○
Perform corrective action procedures	○	○	○	○	○	○
Recognize and report critical values	○	○	○	○	○	○

Blood smears – prepare and stain using the established procedures

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Differentials – perform a minimum of 50. This includes the classification of WBCs and the evaluation or RBC morphology. Data must agree within established confidences limits	○	○	○	○	○	○

Blood smears – prepare and stain using the established procedures *continued*

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Perform WBC and PLT estimates and recognize when instrument counts may be incorrect	○	○	○	○	○	○
Correlate analyzer parameters with smear evaluation	○	○	○	○	○	○
Know how and when to correct WBC count for nRBCs	○	○	○	○	○	○
Report all data according to established policies	○	○	○	○	○	○
Operate and maintain microscope using appropriate methods and following established protocol	○	○	○	○	○	○

Reticulocyte Counts – read and understand the procedure

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Perform a minimum of 5 patient reticulocyte counts	○	○	○	○	○	○
Recognize sources of error	○	○	○	○	○	○
Know the calculations needed to determine the corrected retic, and absolute retic counts	○	○	○	○	○	○

Erythrocyte Sedimentation Rate (ESR) – read and understand the procedure

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Perform a minimum of 25 patient ESRs by established method, correctly setting up, reading, evaluating and reporting results	○	○	○	○	○	○
Recognize sources or error	○	○	○	○	○	○
Know specimen requirements	○	○	○	○	○	○

Body Fluid Evaluation – read and understand the procedure

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Perform a minimum of 15 fluid cell counts using the accepted methodology	○	○	○	○	○	○
Calculate and report accurately	○	○	○	○	○	○
Correctly prepare cytospin slides, stain and differentiate body fluid cells using accepted procedures	○	○	○	○	○	○

Coagulation

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Specimen requirements and processing – read and understand the procedures regarding specimen acceptability and storage	○	○	○	○	○	○
PT, APTT and Fibrinogen – read and understand the procedures	○	○	○	○	○	○
Discuss how to run, document and evaluate Quality Control	○	○	○	○	○	○
Run patient and QC samples according to established procedures	○	○	○	○	○	○
Discuss the relationship of the PT/APTT and Coumadin and Heparin therapy and various disease states	○	○	○	○	○	○
Identify and respond to unexpected and critical results	○	○	○	○	○	○
Discuss the protocol for very low and very high Fibrinogen values	○	○	○	○	○	○
D-dimer and FDP Tests – read and discuss the procedures	○	○	○	○	○	○

MISC Heme Tests – read procedure and perform tests if applicable

	Exceeds Standards (100%)	Above Standards (90%)	Meets Standards (80%)	Below Standards (70%)	Fails to Meet Standards (60%)	N/A
Perform tests by established methods, correctly setting up reading, evaluating, and reporting results	○	○	○	○	○	○
Special coagulation testing: 1:1 mix, Factor assays, AT, PC and PS, ACTPC/Factor V, Leiden, DRVVT	○	○	○	○	○	○
Platelet function testing: BT, PFA	○	○	○	○	○	○
Hemoglobin electrophoresis/ Sickle cell screening	○	○	○	○	○	○
Bone Marrows – assist (or observe) with the performance of a Bone Marrow procedure following policies and procedures	○	○	○	○	○	○
Cytochemical stains – perform stains following policies and procedures	○	○	○	○	○	○

Additional Comments

Clinical Instructor:_____

Date:_____

Student's Evaluation of Clinical Practicum Site

Name:_____ Clinical Site:_____

Department:_____

Please provide your thoughtful responses to the following statement for each Clinical Rotation Site and Laboratory personnel. A numerical average of responses to each statement by students in this learning experience will be provided to the clinical site **after** your learning experience has ended **and** grades are finalized.

Use the following scale for all statements:

5 = strongly agree
4 = agree
3 = neutral
2 = disagree
1 = strongly disagree

In ***my*** learning experience during this rotation, I feel that:

Clinical Site

1._____ Material presented correlated with stated learning objectives.

2._____ Information was communicated in a clear and organized manner.

3._____ Test theory and clinical significance of each assay was discussed adequately.

4._____ New procedures were adequately demonstrated / explained.

5._____ Operation of equipment, quality control measures and test procedures were adequately explained.

6._____ I was provided adequate time to practice skills.

7._____ I was provided an appropriate amount of supervision when patient samples were analyzed.

8._____ I was provided opportunities for supervised decision making.

9._____ Possible sources of error for each assay were delineated.

10._____ I would recommend this course to another student.

In ***my*** learning experience during this rotation, I feel that:

Clinical Site

1._____ Demonstrated a willingness and availability to help students.

2._____ Displayed caring and respectful behaviors toward students, colleagues and other health care professionals.

3._____ Exhibited a professional attitude toward students and teaching.

4._____ Stressed teamwork and cooperation with colleagues and other health care professionals.

5._____ Overall, demonstrated effectiveness as teachers and role models.

6._____ I would be comfortable working with these CLS (Technologists) after graduation.

Written Comments: please give any comments that you feel would be helpful to improve the clinical rotation experience. If commenting about a specific person, please list by name.

COVID-19 GUIDELINES and PROCEDURES

Prior to leaving for your clinical affiliate. Each day that you are on site at your clinical affiliate, you need to complete the CLS REDCap survey where you will report your temperature, if you have any symptoms of COVID-19, and if you have had close contact with a person known to be COVID-19 positive or symptomatic for COVID-19. Here is the link to the survey: Wellness Tracking survey. If that link does not work, try copying this link into your web browser: https://redcap.kumc.edu/surveys/?s=PYL3T7L7K8

If you have a fever, COVID-19 symptoms, or exposure to a COVID-19 positive person, do not report to your clinical site. Instead, call the COVID Hotline at 913-588-1600 (#3, #1) to assess your situation and receive a recommendation for an appropriate course of action. You then are to call the following individuals:

- the contact person at your clinical affiliate
- For clinical concentration students: Professor Jones (913-588-1099)
- For molecular concentration students: Dr. Elsinghorst (913-588-1089)

What constitutes close contact? Operationally, the CDC defines close contact as being within 6 feet for a total of 15 minutes to an individual who is symptomatic or has tested positive for COVID-19. Brief interactions are less likely to result in transmission; however, symptoms and the type of interaction (e.g., did the infected person cough directly into your face) remain important.

At your clinical affiliate. Follow all COVID guidelines provided by your clinical site regarding policies and procedures. Be certain to communicate with the contact person at your clinical site prior to the first day of rotations to ensure you are familiar with those policies and procedures.