



Online Clinical Competency Checklist - MLS 1010 Core Laboratory Skills

LABORATORY CLINICAL EXPERIENCE OBJECTIVES

(General Laboratory Safety, Phlebotomy, Urinalysis, Specimen Processing and Point of Care)

At the completion of the MLS 1010 course, the student will have successfully completed the following:

- The student will correctly perform testing with the analyzers routinely used in the laboratory for urinalysis. This will include
 correctly troubleshooting analyzer performance problems, and evaluating patient test results for critical values, short-sampling
 errors, and inappropriate specimens. The student will change or replace reagents / disposables as needed by the analyzer(s).
- 2. The student will correctly perform microscopic urinalysis without automated instrumentation, using a brightfield of phase contrast microscope.
- 3. The student will correctly perform, or assist in performing Daily and Weekly Preventative Maintenance the urinalysis equipment routinely used in the laboratory.
- 4. The student will review the calibration procedures for any urinalysis analyzers used in the laboratory.
- 5. The student will perform Daily/Shift QC procedures on the analyzers or test methods used for urinalysis. The student will learn the laboratory's SOP for resolving QC discrepancies, and then correctly apply those procedures, including all required documentation activities.
- 6. The student will perform, or assist in performing, routine testing (as deemed appropriate for students by the clinical facility) in phlebotomy, urinalysis, specimen processing in all areas where applicable and Point of Care testing.
- 7. Students with no phlebotomy experience are expected to perform 2 successful venipunctures.
- 8. The student will correctly report test results (STATS, critical values, etc.) by telephone to a nurse, physician or other appropriate health care professional, according to the SOP used by the laboratory.
- 9. We realize students might have previous experience with phlebotomy and specimen processing. Students already deemed competent in phlebotomy or specimen processing skills listed do not need to repeat the lab assignment for that particular skill. Instead of spending time in areas where they are already proficient, students may complete a project in lieu of the corresponding area on the competency checklist. Alternatively, if a project is not feasible, students may choose to spend additional hours working in other areas of the competency checklist (ie: microscopy and urinalysis). Below are the guidelines for projects:
 - The project needs to revolve around an area in which the student is already competent.
 - The project needs to be approved by the student's mentor and MLS 1010 course professor.
 - The mentor still needs to sign off that the student is competent on the areas listed in competency checklist.
 - If students opt to complete a project in lieu of the phlebotomy and specimen processing tasks, the project needs to take the minimum amount of hours that the student would have been required to complete in those areas (phlebotomy: 8-10 hours / specimen processing 4-5 hours).
 - The student must submit the corresponding lab narrative within the canvas course describing what they did to complete the project, in detail, including how many hours they spent completing the project.
 - Project ideas may include assisting in training, competency, writing of procedures, implementing new processes, etc.
 - The student must perform this project off the clock (unpaid hours).

MLS 1010 is an introductory course to medical laboratory sciences. While students are expected to reach proficiency in microscopy and urinalysis, other areas of the competency such as Clinical Chemistry, Clinical Microbiology, and Immunology are expected to be covered at an introductory level. Experience performing Waived and Point of Care tests in these areas is sufficient to meet the requirements of this course, as future courses will require a higher level of competency with specific rotations in these disciplines. For students who have no experience in phlebotomy, the expectation is for them to perform two successful venipunctures in accordance with lab policies.

Students should work together with their respective mentors to complete the listed objectives. Accuracy, precision, timely reporting of test results, and demeanor must comply with the laboratory's acceptable standards. While working in the laboratory, the student must meet laboratory standards for work habit skills in patient confidentiality, communication skills, laboratory safety, universal precautions, waste disposal, and equipment/work area maintenance. It is requested that the student's laboratory competency evaluation be completed by the clinical mentor *in the presence of the student* so as to allow verbal feedback to the student regarding the student's progress and performance.

Note: As part of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) accreditation regulations, no student may engage in **service work** during his/her clinical experience. All laboratory test results generated by students during their clinical hours must be directly supervised by clinical laboratory staff. While the student is performing their clinical hours, they must be performing duties as a student, and not an employee. **Definition of Service Work:** Providing or generating results of clinical tests on patient samples without direct supervision of clinical staff or supervisor managers which exceeds the expected component required for the educational process.

Online Clinical Competency Checklist - MLS 1010 Core Laboratory Skills

| Student: | Wildcat ID # |
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| | Revised 4/20/2018 |
| Course Instructor: | |
| Mentors (list all for this course): | |
| Facility: | |
| LEVELS OF ACI | HIEVEMENT/SCORING KEY |
| 1: Discussed: Process was discussed, principle explained | ed, student acknowledges an understanding of the process or principle. |
| demonstration and has been allowed to ask questions as need | ded. The student acknowledges an understanding of the process or |
| student demonstrates knowledge of how to perform the proc | ess or task by actual performance under direct, maximum supervision, |
| · | · |
| | |
| N/A: Not Available: The nature of the laboratory does no | ot allow the student access to the equipment/test method. |
| item is not available at the lab, please N/A that area so the stu | udent does not lose points. If something is not available, but was |
| Please have all mentors sign and date below. | |
| Mentor Signature | Date |
| Course Instructor: Mentors (list all for this course): Facility: LEVELS OF ACHIEVEMENT/SCORING KEY 1: Discussed: Process was discussed, principle explained, student acknowledges an understanding of the process or principle. 2: Demonstrated: Process has been performed and demonstrated by the practicum instructor. Student has observed demonstration and has been allowed to ask questions as needed. The student acknowledges an understanding of the process or principle by verbally explaining the process or principle back to the practicum instructor. 3: Practiced: Student has practiced the process under the direction and maximum supervision of the practicum instructor. The student demonstrates knowledge of how to perform the process or task by actual performance under direct, maximum supervision, but without having to demonstrate any particular competency at that task or process. 4: Maximum Supervision: The student has performed the process under the direct, maximum supervision of the practicum instructor, and with the level of competency required by the laboratory for that task or process. 5: Minimum Supervision: The student can perform the process satisfactorily with only minimum or non-direct supervision by the practicum instructor, and the performance meets the level of competency required by the laboratory for that task or process. N/A: Not Available: The nature of the laboratory does not allow the student access to the equipment/test method. Note: The competencies will be graded for a total of 100 pts. Points will be deducted for competency categories that are not met. If an item is not available at the lab, please N/A that area so the student does not lose points. If something is not available, but was discussed with the student, please write, "1 – N/A". Students must achieve a minimum of 80% on their competency checklist in order t pass. Please have all mentors sign and date below. | |
| Mentor Signature | Date |
| Mentor Signature | Date |
| Comments: | |
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Student: ______ Wildcat ID #_____

| Urinalysis | Mandatory Skill | Expected Score | Student Score | Date complete | Mentor initial |
|--|--------------------|-------------------|------------------|---------------|-------------------|
| Correctly identifies urine sample based on color and character. | М | 5 | | | |
| Follows correct laboratory procedures in performing urine dipstick analysis. | М | 5 | | | |
| Follows procedures for urine confirmatory testing (SSA, Clinitest, Acetest, & Icotest). | | 2 | | | |
| Follows correct laboratory procedures in performing manual urine microscopic | M | 5 | | | |
| analysis. | | 3 | | | |
| Correctly identifies common cellular elements found in urine samples. | M | 5 | | | |
| Correctly identifies common crystals found in urine samples. | | 4 | | | |
| Correctly identifies common casts found in urine samples. | | 4 | | | |
| Distinguishes common microscopic artifacts from urinary formed elements. | | 4 | | | |
| Demonstrates the ability to operate instrumentation used for routine urinalysis testing. | | 5 | | | |
| Proficient in daily/weekly preventative maintenance on equipment used for urinalysis. | | 4 | | | |
| Performs urinalysis daily/shift QC procedures according to lab standards. | | 4 | | | |
| Evaluates urinalysis cumulative QC data for abnormalities. | | 4 | | | |
| Phlebotomy | | | | | |
| Demonstrates proper venipuncture technique. | М | 5 | l | | |
| Identifies patients using proper procedures. | М | 5 | | | |
| Knowledgeable of the proper order of blood collection according to tube color. | M | 5 | | | |
| Demonstrates proper finger/heal stick technique. | *** | 5 | | | |
| Demonstrates proper technique with pediatric patients. | | 5 | | | |
| Labels specimens using institution policy. | M | 5 | | | |
| Draws appropriate tubes for requested tests. | M | 5 | | | |
| Evaluates specimens for common collection errors. | M | 5 | | | |
| · | IVI | 3 | | | |
| Specimen Processing | 1 | T _ | I | | |
| Separates and distributes in-house samples to the appropriate department for testing. | M | 5 | | | |
| Proficient in processing samples to be sent to reference laboratories, where applicable. | M | 5 | | | |
| Demonstrates knowledge of the processing and handling of samples other | | 3 | | | |
| than blood and urine (ie: joint fluid, semen, stool, etc), according to lab | | | | | |
| protocol. Knowledge of proper guidelines for specimen storage requirements and | M | 5 | | | |
| sample transport. | | | | | |
| Demonstrates suitable knowledge of the laboratory's computer system (ie: LIS) | М | 4 | | | |
| as it relates to specimen processing. | | | | | |
| Lab Safety | | | | | |
| Strictly adheres to the Universal Precautions policy of the facility. | М | 5 | | | |
| Wears protective gear as outlined by the facility. | | 5 | | | _ <u> </u> |
| Knowledgeable of and demonstrates proper disposal technique of biohazard materials. | | 5 | | | |
| Always washes hands before leaving the laboratory area. | | 5 | | | |
| | 1 | i | i . | | |

| | 1 | | | I | |
|--|-----|-------------------|------------------|---------------|-------------------|
| Knowledge of safety shower, eyewash station, & other applicable safety equipment. | | 5 | | | |
| Hematology | | Expected Score | Student Score | Date complete | Mentor initial |
| Demonstrates the ability to operate and troubleshoot instrumentation used | | 3 | | | |
| for routine hematology and coagulation analysis. | | | | | |
| Performs hematology and coagulation daily/shift QC procedures. | | 4 | | | |
| Evaluates cumulative hematology/coagulation QC data for abnormalities. | | 3 | | | |
| Demonstrates knowledge and proficiency in daily/weekly preventative | | | | | |
| maintenance on laboratory equipment used for routine | | 3 | | | |
| hematology/coagulation. | | | | | |
| Makes and stains blood slides suitable for microscopic analysis. | | 4 | | | |
| Ability to perform a normal differential. | М | 4 | | | |
| Correctly identifies normal cellular elements found in blood smears. | М | 4 | | | |
| Evaluates patient test results for critical values and specimen errors, and | | 4 | | | |
| properly notifies the care provider. | | | | | |
| Immunology/Serology | | | | | |
| Correctly processes specimens & demonstrates proper handling to eliminate | | 4 | | | |
| hazards. | | | | | |
| Performs necessary quality control procedures with all test procedures. | | 4 | | | |
| Correctly records QC, correlates results, and recognizes sources of error. | | 4 | | | |
| Performs tests representative of the following methodologies: | | | | | |
| EIA/ELISA | | 3 | | | |
| Latex Agglutination or Other agglutination-type Serology Test Kits | М | 5 | | | |
| Fluorescence (Optional) | | 4 | | | |
| Nephlometry (Optional) | | 4 | | | |
| Diffusion (Optional) | | 4 | | | |
| Chemistry/Microbiology/Point of Care Testing (POCT) | | | | | |
| Demonstrates the ability to operate and troubleshoot | М | | | | |
| instrumentation used for waived and moderate complexity testing including | | 5 | | | |
| POCT. | | | | | |
| Performs POCT daily/shift QC procedures according to laboratory standards. | М | 4 | | | |
| Evaluates cumulative chemistry or point of care testing QC data for | | 4 | | | |
| abnormalities. | | | | | |
| Demonstrates knowledge and proficiency in daily/weekly preventative | | 4 | | | |
| maintenance on laboratory equipment used for routine chemistry point of | | 4 | | | |
| care testing. Evaluates patient test results for critical values and specimen errors on all | M | | | | |
| POCT performed in the facility, then properly notifies the care provider. | IVI | 4 | | | |
| Demonstrates the ability to operate and troubleshoot all POCT hand held | | _ | | | |
| equipment. | | 4 | | | |
| Demonstrates the ability to set up cultures from various sources in accordance | | 2 | | | |
| to lab protocol. | | 3 | | | |
| Demonstrates proficiency in performing rapid POCT microbiology testing (ie: | | 5 | | | |
| rapid strep, rapid flu, RSV) according to laboratory standards. | | | | | |

| Student: | Wildcat ID # | ! | | | |
|--|--------------|-------------------|------------------|------------------|-------------------|
| Completing all procedures in adherence to laboratory SOPs, taking no shortcuts or unauthorized modifications of procedure. | М | 5 | | | |
| Student demonstrates honesty by: | | 1 | • | · | |
| Maintaining strict patient confidentiality | М | 5 | | | |
| Accepting control values only when within acceptable limits | М | 5 | | | |
| Performing and documenting daily & weekly maintenance procedures, preventative maintenance, temperature checks, etc. | М | 5 | | | |
| Completing all procedures in adherence to laboratory SOPs, taking no shortcuts or unauthorized modifications of procedure | М | 5 | | | |
| Student demonstrates personal interactive skills and proper professional behavior by: | | Expected Score | Student Score | Date complete | Mentor initial |
| Working with co-workers in a positive manner, promoting productive workflow. | М | 5 | | | |
| Refraining from making statements or actions that represent sexual, ethnic, racial, or homophobic harassment. | М | 5 | | | |
| Willingly and consistently using appropriate personal safety devices when handling caustic, infectious, or hazardous materials. | М | 5 | | | |
| Completing all required tasks and remaining in the work area when scheduled. | М | 5 | | | |
| Being punctual whenever scheduled. | М | 5 | | | |
| Adhering to current dress and appearance in the laboratory setting. | М | 5 | | | |
| Cleaning the work area when leaving the laboratory, returning supplies to appropriate storage location, & disinfecting all work areas used by the student. | М | 5 | | | |
| Student demonstrates professional responsibility by: | | | | | |
| Correctly reporting all patient test values, as well as recognizing and correctly reporting all patient critical test values. | М | 5 | | | |
| Resolving discrepancies in specimen labeling, handling, or collection before reporting results. | М | 5 | | | |
| Hours completed by student: | | • | | | |
| Minimum time required for this lab competency is 64 hours. Mentors are encouraged to increase the number of hours dependent on individual student need. Please verify the number of hours your student spent in the laboratory | hours | 64 hours | | | |
| Based on performance is this the type of person you would consider for potential | al employme | ent? | Υ | N \square | |