**Online Clinical Competency Checklist - MLS 3310 Advanced Immunohematology**

**LABORATORY CLINICAL EXPERIENCE OBJECTIVES**

At the completion of the MLS 3310 course, the student will have successfully completed the following:

1. **Routine testing.** Perform or assist in performing routine testing (as deemed appropriate for students by the clinical facility) in the blood bank laboratory.
2. **Automated Instrumentation**. Perform testing on automated instrumentation used by the laboratory, if applicable. It is noted that not all blood banks have automated instruments in their facilities.
3. **Troubleshooting.** Troubleshoot testing performance problems and evaluate patient test results for critical values, short-sampling errors, and inappropriate specimens.
4. **Preventative Maintenance.** Correctly perform or assist in performing daily and weekly preventative maintenance on the blood bank equipment routinely used in the laboratory.
5. **Calibration.** Review the calibration procedures for any blood bank equipment used in the laboratory.
6. **Quality Control.** Perform daily/shift QC procedures on the analyzers or test methods used in the blood bank. The student will have the opportunity to learn the laboratory’s SOP for resolving QC discrepancies, and then correctly apply those procedures, including all required documentation activities.
7. **Reporting results.** Correctly report test results (STATS, critical values, etc.) by entering data into the laboratory information system (if applicable) and/or by telephone to a nurse, physician or other appropriate health care professional, according to the SOP used by the laboratory.

Students should work with their respective mentors to complete the listed objectives. Accuracy, precision, timely reporting of 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, equipment, and 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. It is understood that not all laboratories will offer the same clinical experience, but mentors should try to accomplish all items in the checklist if the services are available at that location.  
  
**Note**: As part of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) accreditation regulations, no student may engage in **service work** during their 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.

**Certain laboratory activities require pre-work** to be completed by the student prior to attempting to pass off the competency. The activities with **required pre-work** are designated on the competency checklist. It is the student’s responsibility to fill out the date of completion of the required virtual labs/modules.

Course Instructor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Mentors (list all for this course):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Facility: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**For questions about this competency checklist, please contact the instructor: Justin Rhees at** [**justinrhees@weber.edu**](mailto:justinrhees@weber.edu)

We realize that students at different facilities might have previous experience with blood bank. Students that have already been certified by your facility as competent for any of the individual skills listed do not need to repeat the lab assignment for that particular skill. In addition, if the student has been working in blood bank and is proficient in **all areas** on the checklist, there is an option for them to complete a project in lieu of the competency checklist. Below are the guidelines:

* The project needs to revolve around blood bank.
* The project needs to be approved by the student’s mentor and the blood bank professor.
* The mentor still needs to sign off that the student is competent on the blood bank procedures listed in competency checklist.
* The project needs to take the minimum amount of hours that the student would have been required to complete in the blood bank lab (64 hours).
* The student must submit a lab log each week within their blood bank canvas course describing what they have done so far on the project, and how many hours they have completed.
* The student must perform this project off the clock (unpaid hours).

**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 to pass. **N/A is not acceptable with criteria denoted as Mandatory, which is indicated with an “M” in the mandatory column**.

Please note that the goal of the lab competencies is for your mentor to feel comfortable with your ability in the blood bank lab. If your mentor does not feel that the minimum required time is adequate, you should work out a schedule with them to spend more time in the blood bank lab.

**Please have all mentors print their name, initial, sign and date below.**

**Mentor Printed Name**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Initials**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Mentor Signature** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Date** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Mentor Signature** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Date** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Mentor Signature** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Date** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Comments:** |
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| **General Immunohematology** | **Mandatory** | **Expected Score** | **Student Score** | **Date** | **Mentor initial** |
| Student has completed a general orientation of the immunohematology laboratory | M | 1 |  |  |  |
| Correctly processes patient specimens & proper handling to avoid or eliminate errors | M | 5 |  |  |  |
| Correctly prepares 2-4% red blood cell suspensions   * **Required Pre-Work:** Reading Test Tube Reactions Virtual Lab and Quiz completed on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Date) | M | 5 |  |  |  |
| Demonstrates proper technique in reading and grading agglutination reactions.   * **Required Pre-Work:** Reading Test Tube Reactions Virtual Lab and Quiz completed on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Date) | M | 5 |  |  |  |
| Correctly performs ABO groupings (forward and reverse), and resolves any discrepancies appropriately: 20-25 specimens   * **Required Pre-Work:** ABO Forward and Reverse Virtual Lab and Quiz completed on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Date) | M | 5 |  |  |  |
| Correctly performs Rh typing (25 procedures, both positive and negative)   * **Required Pre-Work:** Rh Typing Virtual Lab and Quiz completed on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Date) | M | 5 |  |  |  |
| Correctly performs weak D (Du) determinations (if applicable)   * **Required Pre-Work:** Rh Typing Virtual Lab and Quiz completed on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Date) |  | 4 |  |  |  |
| Correctly performs antibody screening tests (5 procedures)   * **Required Pre-Work:** DAT/IAT Virtual Lab and Quiz completed on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Date) | M | 5 |  |  |  |
| Correctly performs direct antiglobulin tests (5 DATs)   * **Required Pre-Work:** DAT/IAT Virtual Lab and Quiz completed on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Date) | M | 5 |  |  |  |
| Correctly demonstrates knowledge of A subgrouping   * **Required Pre-Work:** Week 4 Lectures and Self-Assessment completed on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Date) |  | 3 |  |  |  |
| Correctly demonstrates knowledge of Rh phenotyping (Perform 1 Rh Phenotype)   * **Required Pre-Work:** Week 5 Lectures and Self-Assessment completed on:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Date) |  | 3 |  |  |  |
|  | **Mandatory** | **Expected Score** | **Student Score** | **Date** | **Mentor initial** |
| **The following list of competency items may be signed off concurrently with the previous section at the mentor’s discretion.** | | | | | |
| Performs necessary quality control with all test procedures | M | 5 |  |  |  |
| Keeps work area clean/organized | M | 5 |  |  |  |
| Chooses correct reagent for each test to be performed | M | 5 |  |  |  |
| Organizes blood bank tasks in proper sequence | M | 5 |  |  |  |
| Correctly performs compatibility testing (5 crossmatches) | M | 5 |  |  |  |
| Demonstrates a working knowledge of the blood bank SOPs. | M | 4 |  |  |  |
| Correctly issues blood and blood products | M | 4 |  |  |  |
| **Special Procedures**   * **Required Pre-Work for Antibody Identification and Antigen Typing:** Week 9 Lectures and Self-Assessment completed on: \_\_\_\_\_\_\_\_\_\_\_\_(Date) * **NOTE:** Elutions are covered during Week 11, and Transfusion Reactions are covered during the last week of the semester. These items may be completed earlier at the mentor’s discretion. | | | | | |
| Correctly performs antibody identification procedures, if applicable. |  | 4 |  |  |  |
| Correctly demonstrates knowledge of antigen typing (Perform 1 Phenotype) |  | 4 |  |  |  |
| Correctly demonstrates knowledge of elution techniques for facility (perform 1 elution) |  | 3 |  |  |  |
| Correctly demonstrates knowledge of transfusion reaction workups for facility |  | 3 |  |  |  |
| **Obstetric and Neonatal Specimens**   * **Required Pre-Work:** Week 10 Lectures and Self-Assessment completed on: \_\_\_\_\_\_\_\_\_\_\_\_\_ (Date) | | | | | |
| Correctly performs cord blood testing (5 procedures) |  | 4 |  |  |  |
| Correctly determines OB patient candidacy for Rh immune globulin |  | 4 |  |  |  |
| Correctly performs fetal screens (at least 1 Rosette test) |  | 4 |  |  |  |
| Correctly performs KB Stain (if applicable) |  | 4 |  |  |  |
| Demonstrates knowledge of proper blood component selection for HDN transfusions |  | 4 |  |  |  |
| **Component Processing**   * **NOTE:** Component Processing and Transfusion Therapy are covered during Week 13 of the semester. The following items may be completed earlier at the mentor’s discretion. | | | | | |
| Correctly selects and pools random donor platelets (if applicable) |  | 4 |  |  |  |
| Correctly selects single donor platelet pheresis units for patients (if applicable) |  | 4 |  |  |  |
| Correctly selects and thaws fresh frozen plasma |  | 4 |  |  |  |
| Correctly uses blood cell washer (as available) |  | 4 |  |  |  |
| Demonstrates knowledge of facility’s policies regarding leukoreduction (as available) |  | 1 |  |  |  |
| Demonstrates knowledge of facility’s policies regarding irradiated units (as available) |  | 1 |  |  |  |
| Correctly thaws and pools cryoprecipitate (if applicable) |  | 1 |  |  |  |
| **Student demonstrates honesty by:** | | | | | |
| Maintaining strict patient confidentiality | M | 5 |  |  |  |
| Accepting control values only when within acceptable limits | M | 5 |  |  |  |
| Performing and documenting daily & weekly maintenance procedures, preventative maintenance, temperature checks, etc. | M | 5 |  |  |  |
| **Student demonstrates honesty by (Continued):** | **Mandatory** | **Expected Score** | **Student Score** | **Date** | **Mentor initial** |
| Completing all procedures in adherence to laboratory SOPs, taking no shortcuts or unauthorized modifications of procedure | M | 5 |  |  |  |
| **Student demonstrates personal interactive skills and proper professional behavior by:** | | | | | |
| Working with co-workers in a positive manner, promoting productive workflow. | M | 5 |  |  |  |
| Refraining from making statements or actions that represent sexual, ethnic, racial, or homophobic harassment. | M | 5 |  |  |  |
| Willingly and consistently using appropriate personal safety devices when handling caustic, infectious, or hazardous materials. | M | 5 |  |  |  |
| Completing all required tasks and remaining in the work area when scheduled. | M | 5 |  |  |  |
| Being punctual whenever scheduled. | M | 5 |  |  |  |
| Adhering to current dress and appearance in the laboratory setting. | M | 5 |  |  |  |
| Cleaning the work area when leaving the laboratory, returning supplies to appropriate storage location, & disinfecting all work areas used by the student. | M | 5 |  |  |  |
| **Student demonstrates professional responsibility by:** | | | | | |
| Correctly reporting all patient test values, as well as recognizing and correctly reporting all patient critical test values. |  | 2 |  |  |  |
| Resolving discrepancies in specimen labeling, handling, or collection before reporting results. |  | 4 |  |  |  |
| **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: | M | 64 hours |  |  |  |
| Based on performance is this the type of person you would consider for potential employment? Y N | | | | | |