ARIZONA CTE PROGRAM STANDARDS AND MEASUREMENT CRITERIA

LABORATORY ASSISTING, 51.0800.30	
1.0	**APPLY STANDARD PRECAUTIONS AND SAFETY MEASURES**
1.1	Demonstrate knowledge of communicable diseases and blood borne pathogens
1.2	Use Universal Precautions according to OSHA (Occupational Safety and Health Administration) and use Transmission-based Precautions according to CDC (Center for Disease Control)
1.3	Use proper hand hygiene according CDC (Center for Disease Control)
1.4	Don, remove, and discard PPE (personal protective equipment such as gloves, gowns, masks, lab coats, goggles, and face shields) according to standard procedure
1.5	Demonstrate knowledge of isolation and the use of isolation procedures
1.6	Comply with hazardous labeling requirements according to OSHA (e.g., safety signs, symbols, and special instructions)
1.7	Describe procedures for cleaning laboratory spills
1.8	Handle and dispose of contaminated and hazardous items according to OSHA guidelines
1.9	Use fire and chemical safety protocols (e.g., SDSs and the use of fire extinguishers)
1.10	Describe evacuation plans used by various facilities and statewide alert codes
1.11	Maintain a clean work area (e.g., cleaning agents, Clorox, and other disinfectants)
1.12	Maintain a safe work environment (e.g., proper storage of equipment, materials, and chemicals; proper containment of food and personal items; hair tied back and minimal jewelry)
1.13	Use equipment, materials, and chemicals according to manufacturer guidelines
1.14	Report unsafe conditions for self and others (e.g., frayed cords, spillages, puddles on floor, and bed rails down)
1.15	Demonstrate proper body mechanics and lifting techniques
2.0	**MAINTAIN THE LABORATORY ACCORDING TO INDUSTRY REGULATIONS AND STANDARDS**
2.1	Comply with federal, state, and local laws, regulations, and guidelines for the laboratory [e.g., CMS (Centers for Medicare and Medicaid Services), CDC (Center for Disease Control), OSHA, CLIA (Clinical Laboratory Improvement Amendment)]
2.2	Adhere to CLIA (Clinical Laboratory Improvement Amendments) regulations and their impact on laboratory functions and procedures
2.3	Comply with voluntary accrediting and inspection agency requirements [e.g., CAP (College of American Pathologists), Joint Commission , and AABB (American Association of Blood Banks)]
2.4	Communicate test results, reference ranges, and specimen requirements to authorized sources according to HIPPA guidelines
2.5	Assess active involvement in local, state, and national associations and organizations (people and resources) to keep up-to-date regarding the industry
3.0	**DEMONSTRATE LEGAL AND ETHICAL PRACTICES**

3.1	Recognize liability associated with the practice of laboratory assisting (risk management, patient refusal to comply)
3.2	Comply with the Patients' Bill of Rights according to AMA (American Medical Association) and AHA (American Hospital Association)
3.3	Protect patient confidentiality according to HIPPA guidelines
3.4	Function within the laboratory assistant's scope of practice (duties and responsibilities)
4.0	**PERFORM THE PHLEBOTOMY PROCEDURE**
4.1	Explain the legal scope of practice and laws and regulations regarding phlebotomy and point-of-care testing
4.2	Use terms, abbreviations, and codes commonly used in laboratory testing
4.3	Read physician orders/laboratory requisitions to determine specimen requirements
4.4	Order tests according to physician's orders, including inside and outside laboratories
4.5	Follow written facility testing procedures and protocol
4.6	Use the proper method (two proofs of identify) to ensure patient identification
4.7	Provide a comfortable, safe environment and explain lab procedures to the patient, using an interpreter if needed
4.8	Use phlebotomy equipment according to manufacturer guidelines
4.9	Select the appropriate tube following test requirement guidelines
4.10	Describe basic functions of the cardiovascular system
4.11	Distinguish characteristics of arterial, venous, and capillary blood
4.12	Demonstrate an understanding of the anatomy and physiology of the hand and arm
4.13	Perform the phlebotomist collection procedures (venous blood, capillary blood, blood cultures)
5.0	**PERFORM SPECIMEN COLLECTION AND PROCESSING PROCEDURES**
5.1	Demonstrate the proper method of patient identification
5.2	Instruct the patient in the proper procedure for collecting semen, urine, feces, and other body fluids
5.3	Describe procedures for testing urine, blood, occult blood, and capillary glucose
5.4	Use terms, abbreviations, and codes commonly used in the laboratory regarding specimen collection and processing (e.g., capillary vs. venous vs. arterial)
5.5	Use reference values for selected specimen (point-of-care testing)
5.6	Read physician orders/laboratory requisitions to determine specimen requirements

5.7	Follow written facility testing procedures
5.8	Choose equipment and supplies for selected specimens
5.9	Use blood bank bands and identification according to facilities policies
5.10	Label, transport, and store selected specimens according to established protocol
5.11	Determine specimen acceptability (e.g., preparation; type of specimen; collection, handling, and storage of specimen; and presence of interfering substances)
5.12	Prepare for a test run (sample and reagent preparation, use of standards and controls, instrument calibration, performance and maintenance checks, malfunction identification and troubleshooting)
5.13	Handle sterile and non-sterile items according to standards and procedures
5.14	Perform specimen collection procedures (e.g., throat cultures and RSV swabs)
5.15	Perform processing and pre-analytic preparation of specimens (centrifuge, separate, aliquot, and label)
5.16	Store specimens (time, temperature, light, packaging, and transport off-site)
5.17	Follow chain-of-custody procedure (drug screen testing, blood alcohol testing)
5.18	Report results according to established protocol and using appropriate documentation procedures
5.19	Identify and report specimens that are STAT or ASAP according to established protocol
5.20	Define quality control terms (e.g., trends and shifts, means and modes, and documentation and corrective action)
6.0	**DEMONSTRATE LABORATORY DOCUMENTATION, QUALITY CONTROL, AND QUALITY ASSURANCE**
6.1	Explain the quality control process on manual testing and instrumentation
6.2	Explain the quality control check on refrigerators, centrifuge, rotators, and incubators
6.3	Apply quality improvement procedures to laboratory activities as defined by the facility, department, and profession
6.4	Perform quality assessment and improvement activities
6.5	Perform preventive maintenance on instruments and equipment (e.g, recognize equipment malfunctions and notify appropriate authority)
6.6	Describe calibrating and monitoring instruments
6.7	Recognize procedural and technical problems and take corrective action according to predetermined criteria
7.0	**PERFORM URINALYSIS TESTING**
7.1	Demonstrate knowledge of basic physiology of urinary system

7.2	Prepare for testing (perform instrument setup, calibration, and maintenance; evaluate reagent/dipstick acceptability; collect, handle, and store specimen; perform quality control procedures)
7.3	Perform macroscopic examination of urine [physical and chemical tests, identify normal/abnormal values, recognize interfering substances, define method limitation(s)]
7.4	Perform confirmatory tests (e.g., clinitest, ictocheck, acetest, ASSA)
8.0	**APPLY PRINCIPLES OF IMMUNOLOGY/POINT OF CARE**
8.1	Determine specimen acceptability (patient preparation, type of specimen, collection, handling and storage, presence of interfering substances)
8.2	Prepare for test run (prepare sample and reagent, use standards and controls, calibrate instrument or apparatus, perform maintenance checks, identify/troubleshoot malfunctions)
8.3	Perform immunological assays
8.4	Interpret and report results (identify questionable/contradictory results and provide to appropriate authority)
8.5	Perform and evaluate quality control procedures related to each task according to manufacturer guidelines and perform corrective action if needed
9.0	**APPLY PRINCIPLES OF HEMATOLOGY**
9.1	Determine specimen acceptability (collect, handle, and store specimen; evaluate type and age of specimen and additive; label properly; check for clots)
9.2	Prepare specimen for analysis (prepare sample and reagents, use standards and controls, perform performance and maintenance checks, identify and troubleshoot malfunctions)
9.3	Prepare acceptable blood films [peripheral (size/width thickness, feather edge, straight, and free of streaks) homogeneity, and labeling]
9.4	Stain blood films (e.g., Wright's stain, iron and controls, and retic)
9.5	Perform erythrocyte sedimentation rates (e.g., Wintrobe, Westergren, or their modifications)
10.0	**APPLY PRINCIPLES OF COAGULATION AND HEMOSTASIS**
10.1	Determine specimen acceptability (collection techniques; transport conditions; time, temperature, handling, and storage; additive present—blood-to-anticoagulant ration; check for clots or hemolysis)
10.2	Prepare specimen for analysis (prepare centrifuge, maintain specimen acceptability relative to time and temperature)
10.3	Prepare for test run (prepare sample and reagent, use standards and controls)
10.4	Perform bleeding time (platelet count, limitations of procedure)
11.0	**APPLY PRINCIPLES OF MICROBIOLOGY**
11.1	Determine specimen acceptability (patient preparation, type of specimen, collection, handling and storage of specimen, presence of interfering substances)
11.2	Prepare smears and stains (sample and reagent/stain preparation)
11.3	Inoculate media (sample and media preparation)
11.4	Incubate media (temperature requirements, prepare incubator, maintenance checks)

11.5	Report results to appropriate authority
11.6	Perform and evaluate quality control procedures related to each task and document corrective action
12.0	**REPORT TEST RESULTS**
12.1	Identify and analyze reference values
12.2	Identify, analyze, and respond to critical values
12.3	Match laboratory results with patient information
12.4	Identify abnormal and questionable/contradictory results and refer them to the appropriate authority
12.5	Demonstrate understanding or a variety to laboratory documents for reporting test results both manually and electronically
12.6	Notify specified laboratory personnel when having difficulty with a procedure
12.7	Follow established procedure for correcting and/or amending manual or electronic reports
13.0	**MAINTAIN LABORATORY SUPPLIES AND EQUIPMENT INVENTORY**
13.1	Check for adequate inventory of laboratory supplies and equipment
13.2	Use protocol for ordering laboratory supplies and equipment
13.3	Receive and catalog incoming supplies
13.4	Describe storage of laboratory supplies and equipment
13.5	Prepare, label, and store working reagents
13.6	Use information management systems to record and retrieve laboratory data from work produced on site and reference laboratories