Review pertinent **Safety Regulations**, including

- Name on requisition and specimen do not match, reject the specimen
- PPE required with all specimens = gloves

Review principles, procedures, supplies and equipment used in **Hematology**, including

- RBCs washed with antiglobulin reagent to remove unbound serum globulin
- Washed red cells for patient with history of febrile reactions to transfusions
- Cord blood washed prior to ABO and Rh typing to remove Wharton’s jelly
- Cord blood, RBCs and plasma removed to produce uniform single unit volume = 20 mL
- Interpretation:
  - ABO and Rh results: A pos
  - Antibody screen results: positive
  - CBC – recognize diluted specimen w/all values below normal diluted specimen
  - Increased lymphocytes with deep staining cytoplasm w/darkening at edges and molding around the red cells: mononucleosis
  - Coulter series of hematology instruments: flag Imm Grans II = band neutrophils
- Prussian blue, siderotic granules: iron
- Positive Sickle Cell Screening Test = Hemoglobin S

Review principles, procedures, supplies and equipment used in **Microbiology**, including

- Example of gram positive organism: Strep pneumo
- Staph aureus best quality control catalase
- Best organism for QC catalase: staph aureus
- Catalase positive, coagulase positive = staph aureus
- Tumbling motility: listeria
- Lowenstein-Jensen medium for mycobacterium tuberculosis
- Appropriate sputum: <10 epithelial cells, >25 white cells
- Head lesion sample = gram negative motile, non-spore forming, oxidase positive rod, grape-like odor: pseudomonas aeruginosa
- KOH to detect fungi
- CSF, suitable for anaerobic cultures
- Gram stain criterion to plate a sputum specimen
- Blood culture specimen: protect from contamination, at least 5 mL

Review principles, procedures, supplies and equipment used in **Chemistry**, including

- Hemolyzed specimen: LD, AST, Potassium analytes most likely affected
- Normal fasting range serum or plasma glucose: 70 -100 mg/dL
- Cardiac marker enzymes: Troponin and CK-MB
- Therapeutic monitoring gentamicin: peaks and troughs
- Confirmatory test positive protein reaction urine dipstick, SSA
- UA specimen, refrigerated 2 hours after collection