

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number:** MDL 290

**Credits:** 3

**Course Title:** Coordinated Practice IV-MLT

**Course Description (including lecture hours, lab hours, total contacts)**

Supervised on-the-job training in selected health agencies coordinated by the college. This is the clinical portion of the MT Curriculum where the student attends a clinical site and utilizes their classroom knowledge to effectively perform testing on laboratory samples from patients. Laboratory 12 hours per week.

**General Course Purpose**

A total of 3 weeks of clinical practicum in Hematology, 3 weeks in Microbiology, 3 weeks in Blood Bank, 3 weeks in Clinical Chemistry, and 1 week in Coagulation/ Urinalysis (optional) will be completed utilizing MDL 190, 282, and 290 courses. All checklists must be completed successfully to pass the clinical. There is no lecture associated with this course, only clinical instruction hours (generally 5 days 7AM-3:30 PM shifts per week).

The purpose of this clinical is to expose the student to the various departments in the clinical laboratory, and all tests that are performed in that section. The rotation will help them sharpen their skills and provide them with knowledge and experience that they can apply to their future employment. They will learn to use different types of analyzers and equipment and gain confidence in their own abilities.

**Course Prerequisites/Corequisites** (Entry-level competencies **required** for enrollment)

Students must have completed all MDL courses prior to signing up for this class, and must have permission of the MDL Program Director. MDL 281 is a corequisite of the clinical rotations.

**Course Objectives** (Each item should complete the following sentence.)

Upon completing the course, the student will be able to:

- Perform routine testing of adult, infant, and geriatric patient samples in the following departments with accuracy and precision:
  - Hematology
  - Microbiology
  - Clinical Chemistry
  - Blood Bank
  - Urinalysis
  - Coagulation.
- Assemble all essential equipment needed for the procedures.
- Correctly read all sample tubes for important information.
- Demonstrate proper reporting methods, exhibiting proper patient confidentiality.
- Accurately record all patient and quality control test results.
- Successfully complete all MDL checklists for each rotation.

- Distinguish between acceptable and non-acceptable laboratory techniques in performing clinical tests.
- Discuss the various laboratory test procedures in terms of theory, technique, quality control, and interpretation.
- Use critical theory skills in order to solve laboratory problems.
- Prepare to take a national registry exam on completion of the course.

**Major Topics to be Included**

- Patient Identification
- Proper handling of all required equipment
- Interpersonal skills
- Correct recording of all test and QC results
- Proper handling of samples
- Testing in the following areas:
  - Blood collection
  - Blood bank
  - Clinical chemistry
  - Hematology/Hemostasis studies
  - Microbiology/Mycology
  - Parasitology
  - Serology
  - Urinalysis and other body fluids

**Effective Date of Course Content Summary (Month, Date Year):** 8/1/08