

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

**Course Prefix and Number:** MDL 290

**Credits:** 2

**Course Title:** Coordinated Practice in Clinical Chemistry

**Course Description:** Provides supervised on-the-job training in a clinical chemistry laboratory. Includes skill development and evaluation of chemical analysis technique for blood and other body fluids, analyzing data and formulating reports, performing and analyzing quality control measures, and troubleshooting test parameters. Prerequisites: Successful completion of the first four semesters of the MDL curriculum and program permission to enroll in this course. Co-requisite: MDL 281. Laboratory 40 hours per week for three weeks.

**General Course Purpose:** This course provides students with clinical experience in clinical chemistry. Clinical instruction is generally 5 days per week, 8 hours per day, during standard daytime shifts, as assigned by the clinical facility.

The purpose of this clinical is to provide students with hands-on experience performing clinical laboratory testing of blood and other body fluids. Students will directly apply experiences to their future employment. Students will have the opportunity to demonstrate job entry competency and gain confidence in their own abilities.

**Course Prerequisites and Co-requisites:**

Prerequisites: Successful completion of the first four semesters of the MDL curriculum and program permission to enroll in this course

Co-requisite: MDL 281

**Student Learning Outcomes:**

Upon completing the course, the student will be able to

- a. Demonstrate consistent safe practice within industry-level safety standards;
- b. Perform routine testing of adult, infant, and geriatric patient samples in clinical chemistry;
- c. Demonstrate job entry-level precision and accuracy in performing procedures;
- d. Analyze and record test and quality control data within industry-level accuracy standards;
- e. Distinguish reportable vs. not reportable test results using established industry criteria;
- f. Troubleshoot non-reportable test results;
- g. Formulate accurate reports within industry-level reporting parameters;
- h. Exhibit patient confidentiality within HIPAA parameters; and
- i. Discuss laboratory testing in terms of theory, technique, quality control, and interpretation.

**Major Topics to Be Included**

- a. Patient identification and confidentiality
- b. Specimen handling
- c. Patient/staff interaction
- d. Accurate record keeping--patient and quality control
- e. Instrument use and maintenance
- f. Accurate specimen testing as demonstrated through rotation checklist

**Date Created/Updated** (Month, Day, and Year): January 24, 2019