



## MED 217: Clinical Biochemistry

The course consists of integrated instruction between the College and affiliate hospital laboratory. The primary focus of the course is the biochemical analysis of blood and body fluids in health and disease. Topics include routine manual and automated testing methods, electrophoreses, safety practices and quality control. Prerequisite: MED 200 with a grade of C or better. The course includes 45 hours of lecture and 30 hours of teaching laboratory to be completed at the College during the first half of the semester, and 120 hours of clinical laboratory experience at an affiliate hospital laboratory and 6 hours of clinical seminar at the College during the second half of the semester. Instructional Support Fee applies. Gen. Ed. Competencies Met: Critical Thinking, Information Literacy, Oral Communication and Scientific Reasoning and Discovery.

### Course Student Learning Outcomes

1. List procedure, principle and normal values for specified laboratory tests.
2. Describe collection, appropriateness and preparation of specimens for testing.
3. Prepare materials and supplies and perform, interpret and analyze laboratory tests commonly performed in a clinical chemistry laboratory.
4. Discuss and interpret quality control and quality assurance applications necessary to ensure reliability of test results and equipment.
5. Apply concepts of instrumentation to chemical analysis.
6. Recognize abnormal results and describe corrective action.
7. Accurately perform specimen dilutions when necessary and include appropriate calculations when determining specimen results.
8. Discuss clinical significance of chemistry testing.
9. Follow the program safety policies in the CLS classroom.

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1. Communicate appropriately using proper medical and laboratory terminology.

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1. Maintain patient confidentiality.

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1. Work cooperatively with fellow students, instructors and college staff.

**Credits:** 6

**Program:** Medical Laboratory Technology