

**NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY
MDL 265 - ADVANCE CLINICAL CHEMISTRY (2 CR.)**

Course Description

Presents principles of current special chemistry techniques. Lecture 2 hours per week.

General Course Purpose

The purpose of this course is to present medical laboratory technology students with more advanced information in clinical chemistry.

Course prerequisites/Co-requisites

Students who enroll in this course should have completed MDL 261 with a grade of "C" or better, and be in good standing in the second year of the Medical Laboratory Technology AAS degree program or program approval.

Course Objectives

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

- Discuss the principles of analysis and basic pathophysiology associated with assays of hormones and therapeutic and abused drugs.
- Apply the principles of quality assessment to advanced chemical analyses.
- Contrast unique features of chemistry testing in children and the elderly with that of adults
- Discuss and/or present case studies in clinical chemistry.

Major Topics to be Included

- Endocrine functions
- Therapeutic drug monitoring
- Toxicology
- Special populations (pediatric/geriatric)
- Case studies in clinical chemistry