

I. COURSE DESCRIPTION:

A course designed for students in Nursing to develop an appreciation, largely on the basis of case studies, for the relationship between various common diseases, the underlying biochemistry and the clinical tests used in their diagnosis.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

An appreciation of the practice of laboratory medicine and an understanding of clinical chemistry provides valuable information that can be used in nursing practice. The aim of this course is to enable you to begin to relate a client's clinical signs and symptoms to underlying biochemical and physiological phenomena and these in turn to results provided by the clinical laboratory. Concepts relating to structure, properties and function of the major biological molecules are developed in sufficient detail to permit a qualitative understanding of these substances and their behaviour in living organisms.

III. TOPICS:

1. Unit One: Patient Care Cycle
2. Unit Two: Important Biochemical Molecules and Macromolecules
3. Unit Three: Cell Structure and Function
4. Unit Four: Metabolism and Metabolic Regulation
5. Unit Five: Enzymes and their Application to the Diagnosis of Disease
6. Unit Six: Endocrine System
7. Unit Seven: Carbohydrate Metabolism: Regulation and Clinical Application
8. Unit Eight: Nutrition, Digestion, Absorption
9. Unit Nine: Liver and Biliary Tract Disease
10. Unit Ten: Function and Diseases of the Kidney

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Mazzuchin, A. (2000). *Clinical Chemistry*. Student Resource Package.

There is no required text for the course.

V. EVALUATION PROCESS/GRADING SYSTEM:**Semester 3**

Case History 5%
 Lab Exercise 5%
 2 Assignments 2.5% each
 Midterm Exam 30%

Semester 4

Case History 5%
 Lab Exercise 5%
 2 Assignments 2.5% each
 Final Exam 40%

The following semester grades will be assigned to students in postsecondary courses:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 - 100%	4.00
A	80 - 89%	3.75
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 - 59%	1.00
R (Repeat)	49% or below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field placement or non-graded subject areas.	
U	Unsatisfactory achievement in field placement or non-graded subject areas.	
X	A temporary grade. This is used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see <i>Policies & Procedures Manual – Deferred Grades and Make-up</i>).	
NR	Grade not reported to Registrar's office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has not been possible for the faculty member to report grades.	

VI. SPECIAL NOTES:Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 so that support services can be arranged for you.

Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course outline amendments:

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.