# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY **SAULT STE. MARIE, ONTARIO**



# **COURSE OUTLINE**

**COURSE TITLE:** Clinical Chemistry

CODE NO.: CHMI2220 SEMESTER: 3 and 4

PROGRAM: Collaborative BScN

AUTHOR: Dr. A Mazzuchin: Laurentian University

Dr. Ann Boyonoski: Sault College

DATE: March 2003 PREVIOUS OUTLINE DATED: N/A

**APPROVED:** 

**DEAN** 

**DATE** 

**TOTAL CREDITS:** 6

PREREQUISITE(S):

**HOURS/WEEK:** 6

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## 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. SEMESTER THREE 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

## IV. REQUIRED or RECOMMENDED RESOURCES/TEXTS/MATERIALS:

Mazzuchin, A. (2003). Clinical chemistry. Student Resource Package

Anatomy and Physiology Text (from Bio 2105)

Fischbach, F. (2002). Nurses' quick reference to common laboratory and diagnostic tests (3<sup>rd</sup> ed.). Philadelphia: Lippincott

## V. EVALUATION PROCESS/GRADING SYSTEM:

To be determined

The following semester grades will be assigned to students in post-secondary courses:

		<b>Grade Point</b>
<u>Grade</u>	<u>Definition</u>	<u>Equivalent</u>
A+	90 - 100%	4.00
Α	80 - 89%	3.75
В	70 - 79%	3.00
С	60 - 69%	2.00
F (Fail)	59% and below	0.00
CR (Credit)	Credit for diploma requirements has been	
	awarded.	
S	Satisfactory achievement in field /clinical	
	placement or non-graded subject area.	
U	Unsatisfactory achievement in	
	field/clinical placement or non-graded	
	subject area.	
X	A temporary grade limited to situations	
	with extenuating circumstances giving a	
	student additional time to complete the	
ND	requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course	
	without academic penalty.	

## 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 professor and/or the Special Needs office 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 post-secondary 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.