

# Medical Laboratory Sciences

Medical laboratory technologists are integral members of the health care team who perform diagnostic laboratory testing on blood, body fluids and tissues to aid the physician in the diagnosis, treatment and prevention of disease. It is a fast-paced and challenging profession that will appeal to students with a fascination for biological science.

The medical laboratory technologist examines bacterial cultures for identification and antibiotic sensitivity, assures the compatibility of blood for transfusion, identifies abnormal cells and analyzes the chemical composition of body fluids. As one of Canada's largest group of health care professionals they play an essential role in the health care system.

This profession requires manual dexterity, visual color discrimination, a keen eye for detail, organizational/time management skills and judgement/decision-making ability.

## OBJECTIVES

1. To provide the basic knowledge and skills necessary to perform clinical laboratory procedures.
2. To develop the ability to communicate effectively with the patient and with other members of the health team.
3. To maintain a high level of professional conduct in the performance of duty.

## CURRICULUM

The curriculum for this program is designed to encompass three years of training. The first two years are spent at the college and the emphasis is placed on academic and theoretical training.

During the sixth, seventh, eighth and ninth semesters emphasis is placed upon practical training with clinical experience being conducted in health care institutions and a simulated hospital laboratory environment.

Graduates of the program at the Prince Philip Drive Campus will be eligible to sit the certification examination set by the Canadian Society for Medical Laboratory Science (CSMLS). The CSMLS is the national professional body for medical laboratory technologists.

## ACCREDITATION

The program at the Prince Philip Drive Campus is accredited by the Canadian Medical Association.

## PROGRAM TRANSFERABILITY

Graduates may elect to further their studies and obtain a Bachelor of Technology degree from Memorial University of Newfoundland or a Bachelor of Sciences (Post Diploma, Human Science) from Athabasca University.

## ENTRANCE REQUIREMENTS

For the 2010-2011 academic year, applicants who wish to pursue a career in Medical Laboratory Sciences must complete the Medical Sciences I (General) program of studies. Selection to Medical Laboratory Sciences is competitive and will occur at the end of the second semester.

**PLEASE NOTE** a change to the application process for the Medical Laboratory Sciences program effective January 1, 2010. See the "Application Process for Medical Laboratory Sciences, Medical Radiography, and Respiratory Therapy Programs" section of the calendar for details.

## Selection:

1. Students will compete for entry into the third semester.
2. Competition will be based on academic standing in semesters 1 and 2 of the Medical Sciences I (General) program. Students must pass all first and second semester (minimum 50%) courses and have a minimum G.P.A. of 2.00 to be considered for admission to the third semester.
3. The student's weighted average at the end of the second semester will be used to calculate academic standing for purposes of competition. In the case of students who have been exempted from courses in the first and second semesters, the mark obtained in the course completed by the student at another post secondary institution, or other college program will be used in calculating the weighted average as if the course had been completed as part of the Medical Sciences I (General) program.

**Note:** To be employed in the Medical Laboratory Science field, one must have sufficiently strong eyesight to permit extended microscopic work, and normal colour perception.

## DIPLOMA

- Three years
- September start
- Prince Philip Drive Campus

## COURSES

**Semester 1 and 2 – Refer to Medical Sciences I (General)**

CODE	TITLE	Cr	Le	La	Hrs/wk
<b>Semester 3 (Interession I)</b>					
BL2100	Biology	2	1	2	
PS1100 or PS1150	Psychology	2	2	0	
CH2200 or CH1150	Chemistry	2	1	2	
PS2340	Organizational Behaviour	4	4	0	

The Course and Lab hours per week are based on a 15 week semester. In interession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

CODE	TITLE	Cr	Le	La	Hrs/wk
<b>Semester 4</b>					
BL2400	Microbiology	4	3	4	
CH2340	Biochemistry	2	2	0	
ML1200	Hematology	4	3	3	
ML1300	Introduction to Histological Technique	3	2	2	
ML2400	Introduction to Blood Group Systems	3	2	2	
ML1120	Immunology	2	2	0	
CH2250	Clinical Chemistry	3	2	2	

CODE	TITLE	Cr	Le	La	Hrs/wk
<b>Semester 5</b>					
BL2421	Clinical Microbiology	5	4	3	
CH2511	Clinical Chemistry	4	3	2	
ML1221	Hematology	4	3	2	
ML1320	Introduction to Biological Staining	4	3	2	
ML1510	Introduction to Transfusion Science	4	3	2	

CODE	TITLE	Cr	Le	La	Hrs/wk
<b>Semester 6 (Interession II)</b>					
BL3410	Clinical Microbiology	2	0	30	
CH3510	Clinical Chemistry	2	0	30	
ML2210	Hematology	2	0	30	
ML2310	Histology	2	0	30	
ML2510	Transfusion Science	2	0	30	

CODE	TITLE	Cr	Le	La	Hrs/wk
<b>Semester 7</b>					
SD1660	Clinical Practicum	2	2	Wks	

CODE	TITLE	Cr	Le	La	Hrs/wk
<b>Semester 8</b>					
BL3411	Clinical Microbiology	3	0	30	
CH3511	Clinical Chemistry	3	0	30	
ML2211	Hematology	3	0	30	
ML2311	Histology	3	0	30	
ML2511	Transfusion Science	3	0	30	
SD1630	Working in Health Care	3	3	0	

CODE	TITLE	Cr	Le	La	Hrs/wk
<b>Semester 9</b>					
BL4410	Clinical Microbiology	3	3		
CH4510	Clinical Chemistry	3	3		
ML3210	Hematology	3	3		
ML3310	Histology	3	3		
ML3510	Transfusion Science	3	3		

CODE	TITLE	Cr	Le	La	Hrs/wk
<b>Semester 10</b>					
SD2610	Interdisciplinary Studies	5	0	30	
One week per discipline					

Students in the seventh and ninth semesters of the program will be assigned to one of the affiliated hospitals: Burin Peninsula Health Care Centre, Carbonear General Hospital, Central Newfoundland Regional Health Centre, Dr. G. B. Cross Memorial Hospital, Health Sciences Centre, St. Clare's Mercy Hospital, James Paton Memorial Hospital, Charles S. Curtis Memorial Hospital, Labrador Health Centre, and Western Memorial Regional Hospital.

Students must possess a valid St. John Ambulance Emergency First Aid Certificate and Basic Cardiopulmonary Resuscitation Certificate to be eligible for a diploma from the college.

