

# RESPIRATORY THERAPY (RESP)

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## **RESP 1400 Introduction to Professional Practice 3 cr**

This course provides an introduction to the profession of Respiratory Therapy and the roles and responsibilities of a Respiratory Therapist as a member of the health care team. Emphasis is placed on professional conduct, communication and decision-making around issues affecting client-centered care. The course also introduces the safety aspects of delivering respiratory therapy according to the Canadian Standards Association, as well as workplace health and safety. This course is restricted to students in year one of the Bachelor Respiratory Therapy program.

## **RESP 1410 Health Systems and Respiratory Care 3 cr**

Building on RESP 1400, Introduction to Professional Practice, this course further explores the role of the Respiratory Therapist as a regulated health care professional in Canada and the function of regulatory and professional advocacy organizations. Students will learn concepts of patient safety and quality and how human, material, and financial resource management is accomplished in the Canadian health care system. Emphasis is placed on the integration of professional practice knowledge, skills and attitudes. This course is restricted to students in year one of the Bachelor of Respiratory Therapy program.

## **RESP 1420 Applied Physiology for Respiratory Therapy 6 cr**

The course is designed to provide students with a basic understanding of the function and regulation of the systems and major organs of the human body as they relate to clinical respiratory sciences. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

## **RESP 1430 Respiratory Therapeutics 1 6 cr**

A lecture and laboratory course which introduces basic therapeutic concepts, technologies and techniques employed in respiratory therapy including medical gases, humidity and aerosol therapy, and bronchopulmonary hygiene. It introduces the principles of gas physics, and the physical and chemical properties of medical gases used in respiratory care. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

## **RESP 1440 Pharmacology 3 cr**

This course will introduce the principles of pharmacology, those factors modifying drug effects, and individual pharmacologic agents including: ANS drugs, CNS drugs, cardiovascular medications, respiratory medications, antibiotics, and other drugs relevant to Respiratory Therapy. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

## **RESP 1450 Principles of Mechanical Ventilation 6 cr**

The course will focus on the fundamental physical and physiologic principles involved with mechanical ventilation under normal and abnormal respiratory conditions. Various forms and application strategies of positive pressure ventilation will be introduced and explained as to their effects on the physiological systems. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

## **RESP 1460 Basic Fieldwork 1 4 cr**

This course is comprised of 160 hours of clinical fieldwork experiences in respiratory therapy, provided under the supervision of registered respiratory therapists at one or more approved clinical sites. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

## **RESP 2200 Primary Care in Respiratory Therapy 3 cr**

This course provides an understanding of primary care in Respiratory Therapy practice as a method of supporting individuals and populations with respiratory disease. Students will learn the principles of health promotion and disease prevention, as well as chronic disease management and self-management strategies. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all of the required courses for year one of the program.

## **RESP 2210 Pathophysiology 6 cr**

This course will introduce the pathogenesis of primary diseases of the cardio-respiratory, peripheral vascular, central and peripheral nervous systems. Specific disorders of the renal, metabolic, and immune systems, as well as infectious diseases with particular relevance to respiratory therapy will be introduced. The course will also introduce the differential diagnosis and current strategies employed in the management of these diseases. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

## **RESP 2220 Physical Examination and Health Assessment 3 cr**

This course focuses on the development of the patient/client history and physical examination skills essential to health assessment. Students will apply the findings of health assessments in the determination of differential diagnoses and in the development of respiratory care plans. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

## **RESP 2230 Respiratory Therapeutics 2 6 cr**

This lecture and laboratory based course introduces advanced respiratory therapeutics including airway management, anaesthesia, invasive hemodynamic techniques, blood sample procurement and analysis, and others commonly employed in respiratory therapy. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

## **RESP 2240 Clinical Mechanical Ventilation 3 cr**

This course will discuss the initiation and management of all types of mechanical ventilation, both conventional and advanced, with intra and inter-facility patient transport. Interpretation of detailed pulmonary mechanics will be discussed to allow for assessment of ventilated patients. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

## **RESP 2250 Ventilator Instrumentation 3 cr**

This is a comprehensive course in the function, operation, and application of specified neonatal, pediatric and adult ventilators. Illustration of the necessary skills to setup, monitor and troubleshoot the ventilator will be examined in the classroom as well as in simulated patient case scenarios. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

**RESP 2260 Cardiopulmonary Diagnostics 3 cr**

This course will introduce the principles of cardiac and pulmonary function diagnostics including: static and dynamic measures, determination of volumes and capacities, exercise physiology. Cardiopulmonary function changes relative to common diseases and abnormal physiologic states will be evaluated. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

**RESP 2380 Basic Fieldwork 2 4 cr**

Building on RESP 1460 (Basic Fieldwork1) and RESP 2390 (Clinical Integration and Simulation), this course is comprised of fieldwork experiences which provide the student the opportunity to apply the integrated concepts learned in the first two years of the Respiratory Therapy program in a clinical setting. This course will prepare students for advanced clinical education coursework.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisites: RESP 1460, RESP 2390.

**RESP 2390 Clinical Integration and Simulation 6 cr**

This course provides the student an opportunity to integrate concepts learned in the first two years of the Respiratory Therapy program, and to learn life support protocols prior to participation in advanced clinical education coursework. The course will be delivered through a variety of formats including classroom, seminar, and clinical simulation.

**PR/CR: A minimum grade of C is required unless otherwise indicated.**

Prerequisite: This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all required courses for year one of the program.

**RESP 3320 Clinical Education in Pediatric Respiratory Care 3 cr**

Three weeks of clinical experience in the Pediatric Intensive Care Unit at Children's Hospital. Shiftwork and extended shifts may be required. Course evaluated on a pass/fail basis. 144 hours.

**RESP 3350 Clinical Education in Pulmonary Diagnostics 3 cr**

Three weeks of clinical experience in the pulmonary diagnostic laboratory of an approved clinical site. Course evaluated on a pass/fail basis. 144 hours.

**RESP 3360 Clinical Education in Anesthesia 3 cr**

Three weeks of clinical experience designed to acquaint the student with actual clinical techniques and procedures used in the operating and recovery room. Course evaluated on a pass/fail basis. 144 hours.

**RESP 3370 Clinical Education in Community Care 4 cr**

Four weeks of clinical experience in community care settings including: pre-hospital care, health and wellness promotion, interfacility transport, chronic care, home care and community outreach. Course evaluated on a pass/fail basis. 180 hours.

**RESP 3410 Clinical Education in Critical Care 8 cr**

This course enables students to critically apply skills and concepts in the care of adult patients requiring critical respiratory care. The focus is on attainment of essential Respiratory Therapy competencies for practice.

This course is evaluated on a pass/fail basis. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. May not be held with the former RESP 3310.

**Mutually Exclusive:** RESP 3310

**RESP 3420 Clinical Education in Neonatal Care 5 cr**

This course enables students to critically apply skills and concepts in the care of infants requiring critical respiratory care in the Labor & Delivery, and Neonatal units of the hospitals. The focus is on attainment of essential Respiratory Therapy competencies for practice. This course is evaluated on a pass/fail basis. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. May not hold with the former RESP 3330.

**Mutually Exclusive:** RESP 3330

**RESP 3430 Clinical Education in General Therapeutics 6 cr**

This course enables students to critically apply skills and concepts in the care of adult patients requiring general respiratory care (non-critical care) in the hospital setting. The focus is on attainment of essential Respiratory Therapy competencies for practice. This course is evaluated on a pass/fail basis. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. May not hold with the former RESP 3380.

**Mutually Exclusive:** RESP 3380

**RESP 3440 Current Topics in Respiratory Therapy 6 cr**

Focuses on current issues in health and healthcare, in particular as they relate to respiratory therapy. Students complete a thorough review of the current evidence for practice and ongoing research relating to a topic of interest, and present their findings in a professional forum. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. Not to be held with the former RESP 3300.

**Mutually Exclusive:** RESP 3300