



## **Changes in Health and Therapeutic Interventions I**

### **Course Description**

Changes in Health and Therapeutic Interventions review common health problems (pathophysiology); diagnostic tests; and related concepts of professional nursing practice, including the nurse's role in caring for clients. It is organized according to concepts that are essential to the knowledge base for successful nursing practices. Various diseases and illness are highlighted, from across the lifespan, and in various clinical settings. Concepts such as health promotion and illness prevention, the nursing process, ethical, legal and professional considerations, family, teaching and learning and collaboration are woven into the content of this course. Case studies are used to help students learn to apply knowledge to real-life situations.

If this course is a requirement to meet educational gaps, Changes in Health and Therapeutic Interventions II will also be a requirement.

### **Course Outcomes**

By the end of the course the learner will:

1. Explain common diseases/conditions and associated nursing care typical of registered nursing practice in Canadian health care settings.
2. Describe altered health patterns and therapeutics in relation to providing primary, secondary, and tertiary preventive care.
3. Describe relevant skills and knowledge from pathophysiology and diagnostic tests to effectively plan and implement safe, comprehensive nursing care.
4. Identify principles of critical thinking and evidence-informed practice from pathophysiology as they apply to nursing care.

### **Format and Length of Course**

This course is delivered online with one on-line classroom session. It takes 12 weeks to complete.

## Content

Units	Topics
1	<b>Fluid and Electrolytes: Basic Concepts</b> <ul style="list-style-type: none"> <li>• Fluid Compartments and Movement</li> <li>• Osmolality of Fluids</li> <li>• Disorders in Fluid Balance</li> <li>• Electrolytes</li> <li>• Intravenous solutions</li> </ul>
2	<b>Infection</b> <ul style="list-style-type: none"> <li>• Infectious process</li> <li>• Infectious diseases (e.g., Otitis media, C. difficile, candidiasis, VRE, MRSA, STIs)</li> <li>• Infection control</li> </ul>
3	<b>Inflammation</b> <ul style="list-style-type: none"> <li>• Inflammatory process</li> <li>• Inflammatory bowel disease</li> <li>• Cholecystitis</li> <li>• Pancreatitis</li> </ul>
4	<b>Behavior - Mood</b> <ul style="list-style-type: none"> <li>• Psychological nursing care</li> <li>• Dementia and delirium</li> <li>• Addiction (alcohol, substance, nicotine) and withdrawal</li> <li>• Depression</li> </ul>
5	<b>Sensation and Perception</b> <ul style="list-style-type: none"> <li>• Sensory deprivation, overload and deficit</li> <li>• Hearing loss</li> <li>• Vision loss</li> </ul>
6	<b>Glucose Regulation</b> <ul style="list-style-type: none"> <li>• Diabetes</li> </ul>
7	<b>Nutrition</b> <ul style="list-style-type: none"> <li>• Eating disorders</li> <li>• Obesity</li> <li>• High cholesterol</li> <li>• GERD</li> </ul>

Units	Topics
8	<b>Gas Exchange</b> <ul style="list-style-type: none"> <li>• Respiratory pathophysiology</li> <li>• Asthma/COPD</li> </ul>
9	<b>Perfusion</b> <ul style="list-style-type: none"> <li>• Cardiac pathophysiology</li> <li>• HTN</li> <li>• Heart failure</li> <li>• A-fib</li> </ul>
10	<b>Mobility</b> <ul style="list-style-type: none"> <li>• Mobilization and positioning</li> <li>• Prevention of complications in the immobile client</li> <li>• Musculoskeletal injuries</li> <li>• Multiple Sclerosis</li> <li>• Spinal Cord Injury</li> <li>• ALS</li> </ul>
11	<b>Tissue Integrity</b> <ul style="list-style-type: none"> <li>• Wound care</li> <li>• Burns</li> <li>• Pressure ulcers</li> </ul>
12	<b>Elimination and Sexuality</b> <ul style="list-style-type: none"> <li>• Urinary tract infection</li> <li>• BPH</li> <li>• Kidney stones</li> <li>• Constipation</li> <li>• Sexual health</li> </ul>
13	<b>Comfort</b> <ul style="list-style-type: none"> <li>• Chronic and acute pain</li> <li>• End of life care</li> </ul>
14	<b>Cellular Regulation</b> <ul style="list-style-type: none"> <li>• Cancer- lung, colon</li> <li>• Anemia</li> <li>• Interpretation of Lab values</li> </ul>
15	<b>Immunity</b> <ul style="list-style-type: none"> <li>• Immune system pathophysiology</li> <li>• Care of immunocompromised client</li> <li>• HIV/AIDs</li> </ul>