

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

### **Course Description**

This course reviews concepts as they relate to acute, potentially rapidly changing health problems (pathophysiology); diagnostic tests; and related concepts of professional nursing practice, including the RN's role in caring for clients. Various conditions are highlighted, from across the lifespan, and in various clinical settings. The RN's role in a rapidly changing situation will be highlighted with concepts such as clinical judgement, the nursing process, ethical, legal and professional considerations, interprofessional collaboration and communication.

This course consists of online readings and activities to be completed independently prior to attending the virtual classroom and face-to-face simulation sessions. Theory is reinforced during these sessions, using case studies to help learners to apply knowledge to real-life situations. Learners will be expected to attend all sessions and be prepared to actively participate.

### **Overall Course Outcomes:**

By the end of the course the learner will:

1. Explain common diseases/conditions that can lead to acute, rapidly changing health situations and associated nursing care typical of registered nursing practice in Canadian health care settings.
2. Describe relevant skills and knowledge from pathophysiology and diagnostic tests to effectively plan and implement safe, comprehensive nursing care for these health situations.
3. Identify principles of critical thinking and evidence-based practice from pathophysiology as they apply to medical-surgical nursing care.
4. Practice the role of the RN in managing rapidly changing situations.

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

The theory for this course is delivered entirely online; learners study and review materials on their own and complete two case study assignments to explore, apply and refine knowledge of concepts. Learners also will attend one mandatory virtual classroom session and two half-day face-to-face simulation sessions. During simulation, faculty will use human patient simulators, case studies and debriefing to help foster learning and facilitate transfer of knowledge to clinical practice. Simulation is not graded, however attendance at both days is a mandatory component of the course. It takes 9 weeks to complete.

## Content

Units	Topics
1	<b>Providing Nursing Care in Complex, Rapidly Changing Situations</b> <ul style="list-style-type: none"><li>• Assessment</li><li>• Situational Awareness</li></ul>
2	<b>Consciousness</b> <ul style="list-style-type: none"><li>• Increased Intracranial Pressure</li><li>• Seizures (Epilepsy)</li></ul>
3	<b>Gas Exchange</b> <ul style="list-style-type: none"><li>• Respiratory failure (Pneumonia)</li><li>• Acid-Base Balance</li></ul>
4	<b>Perfusion</b> <ul style="list-style-type: none"><li>• Acute coronary syndrome</li></ul>
5	<b>Fluid and Electrolytes</b> <ul style="list-style-type: none"><li>• Renal Dysfunction (acute kidney injury and chronic kidney disease)</li></ul>
6	<b>Inflammation</b> <ul style="list-style-type: none"><li>• Sepsis</li><li>• Anaphylaxis</li></ul>
7	<b>Glucose Regulation</b> <ul style="list-style-type: none"><li>• DKA and HHS</li></ul>
8	<b>Trauma</b> <ul style="list-style-type: none"><li>• Trauma injury</li><li>• Blood product administration</li><li>• Venous thromboembolic events</li><li>• Injury prevention</li></ul>