



Western Technical College

## 10543109 Nursing Complex Health Alterations I

### Course Outcome Summary

#### Course Information

<b>Description</b>	Complex Health Alterations I prepares the learner to provide and evaluate care for patients across the lifespan with alterations in cardiovascular, respiratory, endocrine, and hematologic systems as well as patients with fluid/electrolyte and acid-base imbalance, and alterations in comfort.
<b>Career Cluster</b>	Health Science
<b>Instructional Level</b>	Associate Degree Courses
<b>Total Credits</b>	3
<b>Total Hours</b>	54

#### Pre/Corequisites

Prerequisite	10543105 Nursing Health Alterations
Prerequisite	10543106 Nursing Health Promotion
Prerequisite	10543107 Nursing Clinical Care Across the Lifespan
Prerequisite	10543108 Nursing Introduction to Clinical Care Management
Prerequisite	10806179 Advanced Anatomy and Physiology
Pre/Corequisite	10806197 Microbiology

#### Textbooks

*Medical-Surgical Nursing: Concepts for Interprofessional Collaborative Care Volume 1 & 2*. 10th Edition. Copyright 2021. Ignatavicius, Donna D, M. Linda Workman, and Cherie Rebar. Publisher: Elsevier Science. **ISBN-13:** 978-0-323-61241-8. Required. (This book is part of a Western bundle package.)

*Maternal-Child Nursing*. 6th Edition. Copyright 2022. McKinney, Emily Slone, Sharon Smith Murray, Susan R. James, and Jean Ashwill. Publisher: Elsevier Science. **ISBN-13:** 978-0-323-69788-0. Required. (This book is

part of a Western bundle package.)

*HESI Package (Dosage Calculation Online, Practice and Proctored Assessment Unlimited, HESI Case Studies, EAQ for NCLEX, 3 Day Review Course)*. Publisher: Elsevier Science. Required.

## Success Abilities

1. Cultivate Passion: Expand a Growth-Mindset
2. Live Responsibly: Develop Resilience
3. Refine Professionalism: Act Ethically
4. Refine Professionalism: Improve Critical Thinking

## Program Outcomes

1. Integrate professional nursing identity reflecting integrity, responsibility, and nursing
2. Communicate comprehensive information using multiple sources in nursing practice
3. Integrate theoretical knowledge to support decision making
4. Integrate the nursing process into patient care across diverse populations
5. Function as a healthcare team member to provide safe and effective care

## Course Competencies

### 1. Evaluate nursing care for patients with coronary artery disease

#### Assessment Strategies

- 1.1. in an oral, written or performance assessment
- 1.2. Written Objective Test
- 1.3. Self Assessment
- 1.4. Scenario Response

#### Criteria

*Your performance will be successful when you:*

- 1.1. apply principles of evidence-based practice when using the nursing process for patients with coronary artery disease
- 1.2. describe the pathophysiology, etiology, and clinical manifestations of coronary artery disease
- 1.3. explain procedures used to screen, diagnose, and treat patients with coronary artery disease
- 1.4. plan nutritional interventions for patients to promote/maintain health with coronary artery disease
- 1.5. integrate pharmacological therapy in the care of patients with coronary artery disease
- 1.6. select teaching/ learning topics to promote self-care for the patient with coronary artery disease
- 1.7. identify available agency and community resources to promote care for patients with coronary artery disease
- 1.8. consider patient diversity across the lifespan when applying principles of patient-centered care

#### Learning Objectives

- 1.a. Interpret assessment findings for the client with coronary artery disease
- 1.b. Collaborate with the interprofessional team to coordinate high-quality care and promote perfusion in clients across the lifespan experiencing coronary artery disease
- 1.c. Teach the client how common therapies improve cardiac output, enhance peripheral perfusion, and prevent worsening cardiovascular problems.
- 1.d. Use clinical judgment to prioritize evidence-based nursing interventions to prevent complications of coronary artery disease
- 1.e. Implement evidence-based nursing care for clients across the lifespan experiencing coronary artery

disease

- 1.f. Evaluate the effectiveness of evidence-based interprofessional collaborative interventions for the management of clients across the lifespan with coronary artery disease

## **2. Evaluate nursing care for patients with other alterations in the cardiovascular system**

### **Assessment Strategies**

- 2.1. in an oral, written or performance assessment
- 2.2. Written Objective Test
- 2.3. Scenario Response

### **Criteria**

*Your performance will be successful when you:*

- 2.1. apply principles of evidence-based practice when using the nursing process for patients with other alterations in the cardiovascular system
- 2.2. describe the pathophysiology, etiology, and clinical manifestations of with other alterations in the cardiovascular system
- 2.3. explain procedures used to screen, diagnose, and treat patients with other alterations in the cardiovascular system
- 2.4. plan nutritional interventions for patients to promote/maintain health with other alterations in the cardiovascular system
- 2.5. integrate pharmacological therapy in the care of patients with other alterations in the cardiovascular system
- 2.6. select teaching/ learning topics to promote self-care for the patient with other alterations in the cardiovascular system
- 2.7. identify available agency and community resources to promote care for patients with other alterations in the cardiovascular system
- 2.8. consider patient diversity across the lifespan when applying principles of patient-centered care

### **Learning Objectives**

- 2.a. Interpret assessment findings for the client other alterations in the cardiac system across the lifespan.
- 2.b. Collaborate with the interprofessional team to coordinate high-quality care and promote perfusion in clients across the lifespan experiencing other alterations in the cardiovascular system.
- 2.c. Teach the client how common therapies improve cardiac output, enhance peripheral perfusion, and prevent worsening cardiovascular problems.
- 2.d. Use clinical judgment to prioritize evidence-based nursing interventions to prevent complications of other alterations in the cardiovascular system.
- 2.e. Implement evidence-based nursing care for clients across the lifespan experiencing other alterations in the cardiovascular system.
- 2.f. Evaluate the effectiveness of evidence-based interprofessional collaborative interventions for management of clients across the lifespan with other alterations in the cardiovascular system.

## **3. Evaluate nursing care for patients with acute alterations in the respiratory system**

### **Assessment Strategies**

- 3.1. Written Objective Test
- 3.2. in an oral, written or performance assessment
- 3.3. Scenario Response

### **Criteria**

*Your performance will be successful when you:*

- 3.1. apply principles of evidence-based practice when using the nursing process for patients with acute alterations in the respiratory system
- 3.2. describe the pathophysiology, etiology, and clinical manifestations of acute alterations in the respiratory system
- 3.3. explain procedures used to screen, diagnose, and treat patients with acute alterations in the respiratory system
- 3.4. plan nutritional interventions for patients to promote/maintain health with acute alterations in the respiratory system
- 3.5. integrate pharmacological therapy in the care of patients with acute alterations in the respiratory system
- 3.6. select teaching/ learning topics to promote self-care for the patient with acute alterations in the

- respiratory system
- 3.7. identify available agency and community resources to promote care for patients with acute alterations in the respiratory system
- 3.8. consider patient diversity across the lifespan when applying principles of patient-centered care

#### **Learning Objectives**

- 3.a. Interpret assessment findings for the client across the lifespan with an acute respiratory alteration.
- 3.b. Collaborate with the interprofessional team to coordinate high-quality care and promote gas exchange in clients across the lifespan experiencing acute alterations in the respiratory system.
- 3.c. Teach the client and caregiver(s) about common drugs and other management strategies used for acute alterations in the respiratory system
- 3.d. Use clinical judgment to prioritize evidence-based nursing interventions to prevent complications of acute alterations in the respiratory system.
- 3.e. Implement evidence-based nursing care for clients across the lifespan experiencing an acute alteration in the respiratory system across the lifespan.
- 3.f. Evaluate the effectiveness of evidence-based interprofessional collaborative interventions for management of clients across the lifespan with acute alterations in the respiratory system.

### **4. Evaluate nursing care for patients with chronic alterations in the respiratory system**

#### **Assessment Strategies**

- 4.1. Self Assessment
- 4.2. in an oral, written or performance assessment
- 4.3. Written Objective Test

#### **Criteria**

*Your performance will be successful when you:*

- 4.1. apply principles of evidence-based practice when using the nursing process for patients with chronic alterations in the respiratory system
- 4.2. describe the pathophysiology, etiology, and clinical manifestations of chronic alterations in the respiratory system
- 4.3. explain procedures used to screen, diagnose, and treat patients with chronic alterations in the respiratory system
- 4.4. plan nutritional interventions for patients to promote/maintain health with chronic alterations in the respiratory system
- 4.5. integrate pharmacological therapy in the care of patients with chronic alterations in the respiratory system
- 4.6. select teaching/ learning topics to promote self-care for the patient with chronic alterations in the respiratory system
- 4.7. identify available agency and community resources to promote care for patients with chronic alterations in the respiratory system
- 4.8. consider patient diversity across the lifespan when applying principles of patient-centered care

#### **Learning Objectives**

- 4.a. Interpret assessment findings for the client across the lifespan with a chronic respiratory alteration.
- 4.b. Collaborate with the interprofessional team to coordinate high-quality care and promote gas exchange in clients across the lifespan experiencing chronic alterations in the respiratory system.
- 4.c. Teach the client and caregiver(s) about common drugs and other management strategies used for chronic alterations in the respiratory system
- 4.d. Use clinical judgment to prioritize evidence-based nursing interventions to prevent complications of chronic alterations in the respiratory system.
- 4.e. Implement evidence-based nursing care for clients across the lifespan experiencing a chronic alteration in the respiratory system across the lifespan.
- 4.f. Evaluate the effectiveness of evidence-based interprofessional collaborative interventions for management of clients across the lifespan with chronic alterations in the respiratory system.

### **5. Evaluate nursing care for patients with alterations in hematology**

#### **Assessment Strategies**

- 5.1. in an oral, written or performance assessment
- 5.2. Self Assessment
- 5.3. Written Objective Test

## Criteria

*Your performance will be successful when you:*

- 5.1. apply principles of evidence-based practice when using the nursing process for patients with alterations in the hematologic system
- 5.2. describe the pathophysiology, etiology, and clinical manifestations of alterations in the hematologic system
- 5.3. explain procedures used to screen, diagnose, and treat patients with alterations in the hematologic system
- 5.4. plan nutritional interventions for patients to promote/maintain health with alterations in the hematologic system
- 5.5. integrate pharmacological therapy in the care of patients with alterations in the hematologic system
- 5.6. select teaching/ learning topics to promote self-care for the patient with alterations in the hematologic system
- 5.7. identify available agency and community resources to promote care for patients with alterations in the hematologic system
- 5.8. consider patient diversity across the lifespan when applying principles of patient-centered care

## Learning Objectives

- 5.a. Differentiate between normal and abnormal hematologic laboratory values.
- 5.b. Collaborate with the interprofessional team to provide high quality care for clients across the lifespan experiencing an alteration in the hematologic system.
- 5.c. Teach the client and caregiver(s) about alterations in hematology.
- 5.d. Use clinical judgment to prioritize care for clients across the lifespan experiencing an alteration in the hematologic system.
- 5.e. Implement evidence-based nursing care for clients across the lifespan experiencing an alteration in the hematologic system.
- 5.f. Evaluate the effectiveness of evidence-based interprofessional collaborative interventions for management of clients across the lifespan with alterations in the hematologic system.

## 6. Evaluate nursing care for patients with alterations in the endocrine system

### Assessment Strategies

- 6.1. in an oral, written or performance assessment
- 6.2. Written Objective Test
- 6.3. Scenario Response
- 6.4. Self Assessment

## Criteria

*Your performance will be successful when you:*

- 6.1. apply principles of evidence-based practice when using the nursing process for patients with alterations in the endocrine system
- 6.2. describe the pathophysiology, etiology, and clinical manifestations of alterations in the endocrine system
- 6.3. explain procedures used to screen, diagnose, and treat patients with alterations in the endocrine system
- 6.4. plan nutritional interventions for patients to promote/maintain health with alterations in the endocrine system
- 6.5. integrate pharmacological therapy in the care of patients with alterations in the endocrine system
- 6.6. select teaching/ learning topics to promote self-care for the patient with alterations in the endocrine system
- 6.7. identify available agency and community resources to promote care for patients with alterations in the endocrine system
- 6.8. consider patient diversity across the lifespan when applying principles of patient-centered care

## Learning Objectives

- 6.a. Interpret assessments findings in the client with alterations in the endocrine system across the lifespan.
- 6.b. Collaborate with the interprofessional team to provide high quality care for clients across the lifespan experiencing an alteration in the endocrine system.
- 6.c. Teach the client and caregiver about alterations in the endocrine system.
- 6.d. Use clinical judgment to prioritize care for clients across the lifespan experiencing an alteration in the endocrine system.
- 6.e. Implement evidence-based nursing care for clients across the lifespan experiencing an alteration in the

endocrine system.

- 6.f. Evaluate the effectiveness of evidence-based interprofessional collaborative interventions for management of clients across the lifespan with alterations in the endocrine system.

## 7. Evaluate nursing care for patients with alterations in fluid and electrolyte balance

### Assessment Strategies

- 7.1. in an oral, written or performance assessment
- 7.2. Scenario Response
- 7.3. Written Objective Test

### Criteria

*Your performance will be successful when you:*

- 7.1. apply principles of evidence-based practice when using the nursing process for patients with alterations in fluid and electrolyte balance
- 7.2. describe the pathophysiology, etiology, and clinical manifestations of alterations in fluid and electrolyte balance
- 7.3. explain procedures used to screen, diagnose, and treat patients with alterations in fluid and electrolyte balance
- 7.4. plan parenteral and enteral nutritional interventions for patients to promote/maintain health with alterations in fluid and electrolyte balance
- 7.5. integrate pharmacological therapy in the care of patients with alterations in fluid and electrolyte balance
- 7.6. select teaching/ learning topics to promote self-care for the patient with alterations in fluid and electrolyte balance
- 7.7. consider patient diversity across the lifespan when applying principles of patient-centered care

### Learning Objectives

- 7.a. Interpret assessment findings for the client with an acid-base imbalance.
- 7.b. Collaborate with the interprofessional team to perform a complete assessment of acid-base balance.
- 7.c. Teach the client and caregiver about acid-base balance strategies.
- 7.d. Use clinical judgment to prioritize care for clients across the lifespan with alterations in acid-base balance.
- 7.e. Implement evidence-based nursing care for clients across the lifespan experiencing an alteration in acid-base balance.
- 7.f. Evaluate the effectiveness of evidence-based interprofessional collaborative interventions for management of clients across the lifespan with alterations in acid-base balance.

## 8. Evaluate nursing care for patients with alterations in acid-base balance

### Assessment Strategies

- 8.1. in an oral, written or performance assessment
- 8.2. Written Objective Test

### Criteria

*Your performance will be successful when you:*

- 8.1. apply principles of evidence-based practice when using the nursing process for patients with alterations in acid-base balance
- 8.2. describe the pathophysiology, etiology, and clinical manifestations of alterations in acid-base balance
- 8.3. explain procedures used to screen, diagnose, and treat patients with alterations in acid-base balance
- 8.4. plan nutritional interventions for patients to promote/maintain health with alterations in acid-base balance
- 8.5. integrate pharmacological therapy in the care of patients with alterations in acid-base balance
- 8.6. select teaching/ learning topics to promote self-care for the patient with alterations in acid-base balance
- 8.7. consider patient diversity across the lifespan when applying principles of patient-centered care

### Learning Objectives

- 8.a. Interpret assessment findings for the client with an acid-base imbalance.
- 8.b. Collaborate with the interprofessional team to perform a complete assessment of acid-base balance.
- 8.c. Teach the client and caregiver about acid-base balance strategies.
- 8.d. Use clinical judgment to prioritize care for clients across the lifespan with alterations in acid-base balance.
- 8.e. Implement evidence-based nursing care for clients across the lifespan experiencing an alteration in

acid-base balance.

- 8.f. Evaluate the effectiveness of evidence-based interprofessional collaborative interventions for management of clients across the lifespan with alterations in acid-base balance.

## **9. Evaluate nursing care for patients with pain and alterations in comfort**

### **Assessment Strategies**

- 9.1. in an oral, written or performance assessment
- 9.2. Written Objective Test
- 9.3. Scenario Response
- 9.4. Self Assessment

### **Criteria**

*Your performance will be successful when you:*

- 9.1. apply principles of evidence-based practice when using the nursing process for patients with pain and alterations in comfort
- 9.2. differentiate acute pain from chronic pain
- 9.3. describe the pathophysiology, etiology, and clinical manifestations of pain and alterations in comfort
- 9.4. integrate pharmacological and non-pharmacological therapy in the care of patients with pain and alterations in comfort
- 9.5. select teaching/ learning topics to promote self-care for the patient with pain and alteration in comfort
- 9.6. identify available agency and community resources to promote care for patients with pain and alterations in comfort
- 9.7. consider patient diversity across the lifespan when applying principles of patient-centered care

### **Learning Objectives**

- 9.a. Identify the role of the nurse as an advocate for clients with acute or chronic pain across the lifespan.
- 9.b. Collaborate with the interprofessional team to provide high quality care to promote comfort in clients with pain and alterations in comfort across the lifespan.
- 9.c. Teach the client and caregiver(s) about pain management strategies.
- 9.d. Use clinical judgment to prioritize care for clients across the lifespan receiving analgesia.
- 9.e. Incorporate nonpharmacologic interventions into the client's plan of care as needed to control pain and promote comfort.
- 9.f. Evaluate the effectiveness of evidence-based interprofessional collaborative interventions for management of clients across the lifespan with pain and alterations in comfort.