BERGEN COMMUNITY COLLEGE

THE SCHOOL OF HEALTH PROFESSIONS

DEPARTMENT OF NURSING

NUR 281

LEVEL II

ADULT HEALTH NURSING - A

COURSE OUTLINE

4 CREDITS

LECTURE: 4 HOURS PER WEEK

CLINICAL: 10 HOURS PER WEEK

CLINICAL CONFERENCE: 2 HOURS PER WEEK

Revised 5/29/18
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Description</td>
<td>4</td>
</tr>
<tr>
<td>Course Learning Outcomes</td>
<td>4</td>
</tr>
<tr>
<td>Teaching and Learning Activities</td>
<td>4</td>
</tr>
<tr>
<td>Level Requirement</td>
<td>4</td>
</tr>
<tr>
<td>Additional Learning Resources</td>
<td>5</td>
</tr>
<tr>
<td>Course Requirements</td>
<td>6</td>
</tr>
<tr>
<td>Course Evaluation</td>
<td>7</td>
</tr>
<tr>
<td>Required Texts</td>
<td>8</td>
</tr>
<tr>
<td>NUR-281 Video List</td>
<td>8</td>
</tr>
<tr>
<td>Teaching/Learning Activities</td>
<td>9-22</td>
</tr>
<tr>
<td>Skills for Nursing Practice</td>
<td>23</td>
</tr>
<tr>
<td>Tracheostomy Care with Suctioning</td>
<td>24</td>
</tr>
<tr>
<td>Process Recording Rubric</td>
<td>25</td>
</tr>
<tr>
<td>Nursing Care Plan Rubric</td>
<td>26</td>
</tr>
</tbody>
</table>
ALL POLICIES AND COURSE REQUIREMENTS ARE SUBJECT TO REVISION ON A SEMESTER BY SEMESTER BASIS. STUDENTS WILL BE NOTIFIED OF ANY REVISION(S) AT THE BEGINNING OF THE SEMESTER IN WHICH THE POLICY OF REQUIREMENTS IS/ARE TO BE IMPLEMENTED DURING THE FIRST MEETING OF THE APPROPRIATE NURSING CLASS.
NUR-281, Adult Health Nursing A

COURSE DESCRIPTION

NUR-281, Adult Health Nursing A is a second level course in the nursing sequence which focuses on the health care of individuals and families who have needs related to fluid and electrolytes, oxygenation and circulation. Students will use the nursing process in a variety of health care settings to assist individuals, families and groups achieve optimum health. This course runs for half the semester concurrently with NUR-282.

CO-REQUISITES: BIO-209, PSY-106, and NUR-282. WRT 201
Lecture (4.00) Laboratory (Clinical Conference) (2.00), Clinical (10.00)

NUR 281 COURSE LEARNING OUTCOMES

1. Provides care based on Orem’s Self Care Model to one or two individuals with deficits in USCRs Air and Water.
2. Applies nursing care that reflects the developmental capabilities of individuals.
3. Engages in therapeutic and professional techniques when interacting with individuals, families, and other health team members.
4. Implements nursing care based on biological, psychological, sociological, cultural, spiritual, and economic factors that influence the health of individuals.
5. Selects nursing activities that support personal, professional, and educational development.
6. Behaves in a professional, ethical, and legal manner effecting nursing practice in the current health care environment.
7. Applies skills in nursing care through the use of a variety of technological resources.
8. Demonstrates critical thinking by reasoning, analyzing, synthesizing, and evaluating information in clinical situations in relation to care of individuals with deficits in Air and Water.
9. Utilizes pharmacological concepts in the clinical and classroom setting to correctly calculate drug and solution problems. Passes the Semester II, Pharmacological Math Computation Exam (PMCE) with a score of 90% or higher.
10. Creates and implements a teaching plan which meets the educational needs of a client.

TEACHING AND LEARNING ACTIVITIES

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Clinical Conference Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Visuals</td>
<td>Case Studies (Classroom, CAI, On-line)</td>
</tr>
<tr>
<td>Clinical Practice:</td>
<td>Assigned and Self-Directed Readings</td>
</tr>
<tr>
<td>Acute Care</td>
<td>Power Point Presentations</td>
</tr>
<tr>
<td>Sub-Acute Care Facilities</td>
<td>NCLEX Review Questions</td>
</tr>
<tr>
<td>Judy Miller Tapes</td>
<td>The Point Tutorials</td>
</tr>
<tr>
<td></td>
<td>Computer Tutorials</td>
</tr>
<tr>
<td></td>
<td>Moodle</td>
</tr>
<tr>
<td></td>
<td>Simulation</td>
</tr>
<tr>
<td></td>
<td>ATI resources</td>
</tr>
</tbody>
</table>

4
Semester Requirement

Passing a Pharmacological Math Computation Exam (PMCE) with a score of 90% is a semester requirement. The PMCE will be given in the first course of each level. If the student does not attain the required 90% passing grade, he/she will be provided two retake opportunities within the confines of that course. Failure to achieve a 90% in the PMCE will result in an "F" for the course in which the test was administered. Calculators may be used at Level II.

Office of Special Services (OSS)

The Office of Specialized Services (OSS) seeks to provide students the opportunity to participate fully in the College’s educational programs and benefit from all aspects of campus life through the use of reasonable and appropriate accommodations and auxiliary services. Annual documentation of certification need must be provided on the first day of class to lead faculty.
Additional learning resources available to supplement classroom lecture, reading, discussion and self-study.

I. The Point Practice and Learn Activities

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Fluid and Electrolytes</td>
</tr>
<tr>
<td>21</td>
<td>Pneumonia</td>
</tr>
<tr>
<td>23</td>
<td>Pulmonary Edema</td>
</tr>
<tr>
<td></td>
<td>Acute Respiratory Distress Syndrome</td>
</tr>
<tr>
<td>24</td>
<td>COPD</td>
</tr>
<tr>
<td></td>
<td>COPD &amp; PUD</td>
</tr>
<tr>
<td>26</td>
<td>Dysrhythmias</td>
</tr>
<tr>
<td>27</td>
<td>Coronary Artery Disease</td>
</tr>
<tr>
<td></td>
<td>Angina</td>
</tr>
<tr>
<td></td>
<td>Myocardial Infarction</td>
</tr>
<tr>
<td></td>
<td>Diabetes, HTN, Coronary Artery Disease</td>
</tr>
<tr>
<td>29</td>
<td>Heart Failure</td>
</tr>
<tr>
<td>30</td>
<td>COPD &amp; PUD</td>
</tr>
<tr>
<td>31</td>
<td>HTN</td>
</tr>
</tbody>
</table>

II. ATI (electronic text)

**Video Case Studies**
- Acid Base Imbalance
- Blood Administration
- Fluid Volume
- Meter Dose Inhaler
- Oxygenation
- Priority Setting

**Skills Module**
- Airway management
- Central Venous Access
- Closed Chest Drainage
- Blood Administration
- Oxygen Therapy

**Practice Exams**
- Fluid and Electrolyte Acid Base
- Cardiovascular
- Respiratory
III. Journal Articles: Available on The Point

IV. Visual Animation
   a. Gas Exchange in Alveoli
   b. Oxygen Transport
   c. Asthma

V. Tutorials
   Chapter 13: Fluid & Electrolytes

VI. Audio: Normal & Abnormal

VII. Audio: Heart & Breath Sounds
COURSE REQUIREMENTS

1. Nursing Care Plan(s)
   Completion of Two Satisfactory Nursing Care Plans. One plan must address the USCR for AIR. Another plan must address the USCR for Water. Refer to NCP rubric.

2. Unit Tests
   Respiratory, 50 questions
   Fluid/Electrolytes, ABG, HTN, vascular disease, aneurysms, 50 questions
   Cardiac, 50 questions
   All test answers must be placed on the exam card.

3. Pharmacological Math
   Review pharmacology/computation text purchased in NUR 182
   Sample questions on Moodle.
   Computation Exam
   Calculators permitted.

4. Patient teaching
   To be addressed in Nursing Care Plan.

5. One Satisfactory Process Recording
   Follow Process Recording Guide distributed in Level I.
   See Process Recording Rubric.

6. CAI/ATI
   Viewing of CAI listings found in Teaching/Learning Activities.

7. Skills Validation
   Absence from validation is a clinical absence. Uniforms are required during validations. A maximum of three attempts are allowed within the confines of the course. Retakes are not the day of the unsatisfactory validation.

8. Required classroom learning activities
   Classroom learning activities are designed to enhance student understanding and comprehension. Completion and comprehension of these activities are reflected in unit exams.

9. Passing Clinical Performance grade & Adherence to Attendance Policy
   Clinical Evaluation tool located in syllabus
COURSE EVALUATION

Course grade will be determined by:

A. Theory Grade

SECTIONS 001 AND 601:

- There will be 3 unit tests totaling 95% of the letter grade. The student must achieve C+ or greater to pass NUR 281.
- The average of the first NCP and the second NCP will equal 5% of the total letter grade

SECTIONS 002 and 602:

- 3 unit tests equals 90% of Final Grade.
- Standardized Test will be 5% of Final Grade.
- The average of the first NCP and the second NCP will equal 5% of the total letter grade

Students are required to earn a ‘P’ or Pass on all sections of the clinical evaluation tool at the final evaluation.

B. Clinical Grade

A failing Clinical grade will result in an "F" for the course.

C. In order to pass the course, the student must receive:

- Theory grade of C+ (77.45 or greater in theory grade)
- Pass the Evaluation of Clinical Performance
- Pass the Trach Skill Validation
- Pass with 90% or greater the Pharmacology Math Computation Exam (PMCE)
- Completion of all required classroom learning activities
- Must take standardized test in section 002 and 602.

D. Target for Success: At Risk students receiving 78% or less on unit exams are to complete a target for success form found on Moodle and email back to course professors.

E. Exam reviews are announced and take place on the date and time as indicated by course faculty. Students are expected to comply with the stated day and time of the exam review.
**REQUIRED TEXTS**

All textbooks from previous courses: NUR 181, NUR 182, and NUR 183.


Related Web Sources

1. www.bergen.edu
2. www.mayohealth.org for cardiac & respiratory resources
3. New Jersey State Nurse's Association: www.njsna.org (scholarship information)
4. American Heart Association: www.americanheart.org
5. American Lung Association: www.lungusa.org
7. www.nursingcenter.com/library
9. ATI programs and supplemental learning materials
10. NUR 281 Moodle Site
USCR FOR AIR

THE RESPIRATORY SYSTEM

I. Definition of the USCR for Air

II. Assessment of the respiratory system
   A. Health history
   B. Physical exam
   C. Diagnostic studies and related nursing responsibilities (i.e. consents, SENS (Supportive Educatrive Nursing System) for test preparations, etc.)
      1. blood studies
      2. oximetry
      3. sputum studies
      4. radiologic studies
      5. endoscopic exams
      6. lung biopsies
   D. Effects of aging on the respiratory system

UPPER RESPIRATORY PROBLEMS

I. Structural, traumatic, infectious disorders of the nose

II. Problems related to the trachea and larynx
   A. Airway obstruction
   B. Endotracheal intubation
   C. Tracheostomy
   D. Laryngectomy
   E. Influenza

LOWER RESPIRATORY PROBLEMS

I. Pulmonary infections
   A. Bronchitis, Pneumonia
      1. pathophysiology (P)
      2. clinical manifestations (CM)
      3. diagnostic studies (DS)
      4. complications
      5. therapeutic management
         a. vaccines
         b. antibiotics
      6. nursing assessment
      7. identification of self-care deficits
         a. preventative measures
         b. related nursing diagnoses
      8. nursing interventions

Teaching/Learning Activities

Read: Anatomy & Physiology, Chapter on Respiratory System
Read: Chapter in Physical Assessment text on respiratory assessment
The Point: Chapter 21, ‘Modalities’
Read: Brunner and ATI (Respiratory System)

Read: Brunner and ATI (upper respiratory)
Read: Pharmacology text, Chapters on antihistamine, decongestants, antitussives & expectorants

The Point Practice and Learn Activities -- Chapter 23
Mr. Darlin Pneumonia
Read: Brunner and ATI, (Lower respiratory)
Read: Pharmacology text chapters on antibiotics
<table>
<thead>
<tr>
<th>Theoretical Content</th>
<th>Teaching/Learning Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOWER RESPIRATORY PROBLEMS (continued)</td>
<td></td>
</tr>
<tr>
<td><strong>B. Tuberculosis (TB)</strong></td>
<td>Read: Brunner and ATI, (Tuberculosis)</td>
</tr>
<tr>
<td>1. review P, CM, DS</td>
<td>Case study: Tuberculosis(Mood)</td>
</tr>
<tr>
<td>2. classification</td>
<td>Read: Pharmacology text, chapter on antitubercular agents</td>
</tr>
<tr>
<td>3. complications</td>
<td></td>
</tr>
<tr>
<td>4. drug therapy</td>
<td></td>
</tr>
<tr>
<td>a. prophylaxis</td>
<td></td>
</tr>
<tr>
<td>b. treatment</td>
<td></td>
</tr>
<tr>
<td>5. nursing assessment</td>
<td></td>
</tr>
<tr>
<td>6. identification of SCDs and related NDs</td>
<td></td>
</tr>
<tr>
<td>7. nursing interventions</td>
<td>Read: Brunner and ATI (lung cancer)</td>
</tr>
<tr>
<td>a. prevent recurrence</td>
<td></td>
</tr>
<tr>
<td>b. prevent spread</td>
<td></td>
</tr>
<tr>
<td>c. maintain normal pulmonary function</td>
<td></td>
</tr>
<tr>
<td><strong>C. Lung cancer</strong></td>
<td>Read: Brunner and ATI (chest trauma and surgery)</td>
</tr>
<tr>
<td>1. review pathophysiology, clinical manifestations and diagnostic studies</td>
<td>The Point Chapter 23 Kathleen Watson Acute Respiratory Distress</td>
</tr>
<tr>
<td>2. complications</td>
<td>Read: Brunner and ATI (Pleural Disorders)</td>
</tr>
<tr>
<td>3. surgical interventions</td>
<td></td>
</tr>
<tr>
<td><strong>II. Chest trauma and thoracic injuries</strong></td>
<td></td>
</tr>
<tr>
<td><strong>A. Pneumothorax: closed, open, tension, hemothorax</strong></td>
<td></td>
</tr>
<tr>
<td><strong>B. Fractured ribs</strong></td>
<td></td>
</tr>
<tr>
<td><strong>C. Flail chest</strong></td>
<td></td>
</tr>
<tr>
<td><strong>D. Chest tubes-nursing management</strong></td>
<td></td>
</tr>
<tr>
<td><strong>E. Chest surgery-postoperative care</strong></td>
<td></td>
</tr>
<tr>
<td><strong>III. Restrictive respiratory disorders</strong></td>
<td></td>
</tr>
<tr>
<td><strong>A. Pleural effusion</strong></td>
<td>Read: Brunner and ATI (obstructive disorders)</td>
</tr>
<tr>
<td><strong>B. Pleurisy</strong></td>
<td>Read: Pharmacology text, chapter on bronchodilators and other respiratory agents</td>
</tr>
<tr>
<td><strong>C. Therapeutic management</strong></td>
<td></td>
</tr>
<tr>
<td><strong>OBSTRUCTIVE PULMONARY DISEASES</strong></td>
<td></td>
</tr>
<tr>
<td><strong>I. Asthma</strong></td>
<td></td>
</tr>
<tr>
<td><strong>A. Review, P, CM, DS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>B. Triggers of asthma attacks</strong></td>
<td></td>
</tr>
<tr>
<td><strong>C. Classification</strong></td>
<td></td>
</tr>
<tr>
<td><strong>D. Status asthmaticus</strong></td>
<td></td>
</tr>
</tbody>
</table>
OBSTRUCTIVE PULMONARY DISEASES (continued)

E. Therapeutic management
1. oxygen therapy
2. pharmacological management
   a. bronchodilators
   b. antiinflammatory
   c. cromolyn
   d. nonprescription

II. Emphysema and Chronic Bronchitis (COPD)
A. Irritants
   1. cigarette smoke
   2. infection
   3. inhaled irritants
   4. aging
B. Review P, CM, DS
C. Complications
   1. respiratory failure
   2. pneumonia
   3. ulcers, GI reflux
   4. corpulmonale
D. Therapeutic management
   1. respiratory therapy
      a. chest PT
      b. peak flow meters
   2. nutritional management
   3. activity
E. Nursing assessment
F. Identification of SCDs
   1. preventative measures
   2. related nursing diagnoses
G. Nursing interventions

RESPIRATORY FAILURE AND ARDS
I. Risk factors
II. Prevention
III. Assessment
IV. Nursing interventions
   A. Ventilator management

THE USCR FOR WATER FLUID, ELECTROLYTE AND ACID-BASE DISTURBANCES
I. Definition of the need for water

The Point: Chapter 24 “COPD”

Read: Brunner and ATI (respiratory failure and ARDS)
Lutz (Nutrition Text) Chapter 22
The Point: Chapter 23: ARDS

Prior to the beginning of this unit review the physiologic processes that regulate fluid, electrolyte and acid-base.
Read: Brunner and ATI (Fluid and Electrolytes)
### Theoretical Content

#### II. Extracellular fluid imbalances: excesses and deficits

- **A. Health history**
- **B. Clinical manifestations**
- **C. Nursing assessments and interventions**
  1. I-O
  2. vital signs
  3. neurologic changes
  4. daily weights
  5. skin
- **D. Identification of SCDs**
  1. preventative measures
  2. related nursing diagnoses

#### III. Electrolyte Imbalances: excesses (hyper) and deficits (hypo)

- **A. Sodium**
- **B. Potassium**
- **C. Calcium**
- **D. Phosphate**
- **E. Magnesium**

#### IV. Causes and clinical manifestations and interventions of electrolyte imbalances

- **A. Appearance**
- **B. Behavior**
- **C. Musculoskeletal**
- **D. Cardiovascular**
- **E. Gastrointestinal**
- **F. Neuromuscular**
- **G. Respiratory**
- **H. GU**

#### V. Acid-base imbalances

- **A. Respiratory acidosis and alkalosis**
- **B. Metabolic acidosis and alkalosis**
- **C. Partially compensated/fully compensated**

- **D. Clinical manifestations & interventions**

#### VI. Correction of fluid, electrolyte and acid-base imbalances

- **A. IV fluids**
  1. isotonic
  2. hypotonic
  3. hypertonic
- **B. IV additives**
- **C. Food sources**
- **D. Potential hazards**
- **E. WC/PC/SENS to control and prevent imbalances**

---

### Teaching/Learning Activities

Required coursework, handwritten, submitted upon entry to class, located on Moodle: F & E terminology.

Read: Pharmacology text, chapter on Fluid & Electrolytes

Read: Brunner and ATI (Arterial blood gas)
Theoretical Content

CARDIAC DIAGNOSTICS

I. Lab tests
   A. Cardiac enzymes
      1. CK
      2. MB fraction
      3. Troponin levels
      4. BNP
   B. Cholesterol
      1. HDL
      2. LDL
   C. Coagulation studies
      1. PT
      2. PTT
      3. INR
   D. Electrolytes
      1. Potassium
      2. Magnesium
   E. CBC
      1. Hgb
      2. Hct

II. Cardiograms
   A. EKG
   B. Stress test
   C. Holter monitor
   D. Thallium/persantine/cardiolyte stress test

III. Cardiography
   A. Echocardiogram
   B. Transesophageal echocardiogram

IV. MUGA scan

V. Cardiac catheterization
   A. Indications
   B. Implementation of pre and post procedure nursing agency

HYPERTENSION (USCR: Water)

I. Regulation of Blood pressure
   A. Cardiac output
   B. Systemic vascular resistance

II. Systemic influences on Blood Pressure
   A. Sympathetic nervous system
   B. Renal system
   C. Endocrine system

III. Classification of Blood Pressure

Teaching/Learning Activities

Read: Brunner and ATI (Cardiac diagnostics)
Read: A&P text chapter on cardiovascular system
Read: Chapter in Physical Assessment Text on Cardiac Assessment

Required coursework, handwritten, submitted upon entry to class, located on Moodle: Cardiovascular terminology.

Review: Basic Concepts and Skills Nursing "Blood Pressure Measurement"
Read: Brunner and ATI (Hypertension)
Read: Nutrition text, chapters on low fat & sodium controlled diet
Read: Pharmacology text chapters on diuretics, antihypertensives, beta blockers & calcium channel blockers

Classroom: Powerpoint at faculty discretion
IV. Definition of hypertension  
   A. Primary hypertension  
   B. Secondary hypertension 

The Point: Chapter 30 “HTN”  
Chapter 31 “HTN”

V. Risk Factor and Preventative Measures for Hypertension

VI. Clinical Manifestations of Hypertension

VII. Systemic Effect of Hypertension  
   A. Cardiac  
   B. Cerebral  
   C. Peripheral vascular  
   D. Renal  
   E. Retinal

VIII. Conservative Treatment of Hypertension  
   A. Diet  
   B. Exercise  
   C. Smoking cessation  
   D. Stress management 

Lutz (Nutrition Text)  
Chapter 18

IX. Pharmacologic Management of Hypertension  
   A. Diuretics  
   B. Beta blockers  
   C. Vasodilators  
   D. ACE inhibitors  
   E. Calcium channel blockers  
   F. Nursing responsibilities

PERIPHERAL ARTERIAL DISEASE  
(USCR: Air or Water)

I. Pathophysiology  

II. Risk Factors

Classroom: Power Point at faculty discretion  
The Point: Chapter 24 “COPD & PVD”

III. Clinical Manifestations/Complications

IV. Diagnosis

V. Clinical Management  
   A. Medication  
   B. Surgery

VI. Implementation of Nursing Agency for a Patient with PAD

VII. Burger's Disease/Raynaud's Phenomenon

VENOUS DISORDERS
I. Thombophlebitis
   A. Pathophysiology
   B. Risk factors
   C. Clinical manifestations/complications
   D. Diagnosis
   E. Clinical management
      1. Anticoagulation
      2. Surgical
   F. Implementation of nursing agency for a patient with a DVT

II. Pulmonary Embolism
   A. Pathophysiology
   B. Clinical manifestations/complications
   C. Diagnosis
   D. Clinical management
      1. Medical
      2. Surgical
   E. Implementation of nursing agency for a patient with a pulmonary embolism

ANEURYSMS (USCR: Water)

I. Thoracic Aortic Aneurysm
   A. Pathophysiology
   B. Clinical manifestations

II. Abdominal Aortic Aneurysm
   A. Pathophysiology
   B. Clinical manifestations

III. Diagnosis of an Aneurysm

IV. Clinical Management of an Aneurysm
   A. Medications
   B. Surgery

V. Aortic Dissection
   A. Pathophysiology
   B. Clinical manifestations
   C. Complications
   D. Diagnosis
   E. Clinical management

ACUTE CORONARY SYNDROME (USCR: Air or Water)

I. Pathophysiology of CAD

IV. Angina Pectoris
   A. Precipitating factor
   B. Types of angina
      1. Stable
      2. Unstable
      3. Prinzmetal's angina
   C. Clinical manifestations of angina
   D. Clinical management of angina

Read: Brunner and ATI (Venous disorders)
Classroom: Power Point at faculty discretion

Read: Brunner and ATI (Pulmonary emboli)

Read: Brunner and ATI (Aneurysms)
Read: Chapter in Physical Assessment Text relating to Aneurysms
Classroom: Power Point at faculty discretion

Read: Brunner and ATI (Acute coronary syndrome)
Read: Pharmacology text, chapter on vasodilators, anticoagulants, & thrombolytics
Read: Nutrition text, chapter on cardiac prevention
The Point, Chapter 27
   • CAD
   • Angina
   • MI
   • Diabetes, HTN & CAD
   • Classroom: Power Point at faculty discretion
1. percutaneous coronary transluminal angioplasty (PCTA)
2. stents
3. nitrates
4. anticoagulants
5. beta blockers
6. calcium channel blockers

F. Implementation of nursing agency for a patient with angina

V. Myocardial Infarction
A. Diagnosis of an MI
   1. clinical presentation
   2. EKG changes
   3. cardiac enzymes
B. Clinical management of an MI
   1. nitrates
   2. pain management
   3. thrombolytics
   4. coronary artery bypass

C. Implementation of nursing agency for a patient with an MI
D. Cardiac rehabilitation

VI. Sudden Cardiac Death
A. Causes
B. Treatment
   1. coronary artery bypass
   2. percutaneous transluminal coronary angioplasty
   3. electrophysiology studies (EPS)
   4. implanted ventricular defibrillators

ARRHYTHMIAS (USCR: Water)

I. Sinus rhythm
   A. Sinus bradycardia
   B. Sinus tachycardia
   C. Precipitating factors
   D. Treatment modalities

II. Atrial dysrhythmias
   A. Atrial fibrillation
   B. Atrial flutter
   C. Precipitation factors
   D. Treatment modalities

III. Ventricular dysrhythmias
   A. Premature ventricular contractions
   B. Ventricular tachycardia/ fibrillation
   C. Treatment modalities

IV. Heart Blocks
   A. Precipitating factors
B. Treatment modalities
C. Caring for a patient with a pacemaker

**CONGESTIVE HEART FAILURE** *(USCR: Air or Water)*

I. Pathophysiology of heart failure
   A. Right sided CHF
   B. Left sided CHF

II. Causes of heart failure
   A. Right sided CHF
   B. Left sided CHF

III. Clinical manifestations
   A. Right sided CHF
   B. Left sided CHF

IV. Clinical Management of Heart Failure
   A. Positive inotropes
   B. Diuretics
   C. Nitrates
   D. Diet
   E. Oxygen

V. Implementation of nursing agency for a patient with CHF

**CARDIOMYOPATHY** *(USCR Air or Water)*

I. Dilated

II. Restrictive

III. Hypertrophic

IV. Related factor clinical manifestations

**INFECTIVE HEART DISEASE** *(USCR: Air or Water)*

I. Endocarditis
   A. Risk factors & preventative measures
   B. Clinical manifestations/complications
   C. Diagnostics
   D. Clinical management
      1. prevention
      2. antibiotics
   E. Implementation of nursing agency
      1. rest
      2. ROM

II. Pericarditis
   A. Risk factors & preventative measures
   B. Clinical manifestations/complications
   C. Diagnostics
   D. Clinical management
      1. NSAID
2. Pericardial window
E. Implementation of nursing agency
   1. pain relief

### Theoretical Content

#### VALVULAR HEART DISEASE (USCR: Air or Water)

1. Mitral stenosis
   A. Related factors
   B. Clinical manifestations

2. Mitral Insufficiency or Mitral Regurgitation
   A. Related factors
   B. Clinical manifestations

3. Mitral Valve Prolapse
   A. Related factors
   B. Clinical manifestations

4. Aortic Stenosis
   A. Related factors
   B. Clinical manifestations

5. Aortic Insufficiency/Regurgitation
   A. Related factors
   B. Clinical manifestations

#### Diagnosis of Valvular Disease

#### Clinical Management of Valvular Disease

A. Medications
B. Surgery

#### Implementation of nursing agency for a Patient with Valvular Heart Disease

---

#### SHOCK (USCR: Water)

1. Clinical manifestations/stages of Shock
   A. Initial
   B. Compensatory
   C. Progressive
   D. Irreversible

2. Clinical Management of Shock
   A. Distributive
      1. neurogenic
      2. septic
      3. anaphylactic
   B. Hypovolemic
   C. Cardiogenic

3. Implementation of Nursing Agency for Shock
   A. Fluids

---

Read: Brunner and ATI (Valvular heart disease)
Classroom: Power Point at faculty discretion

Read: Brunner and ATI (Shock)
Classroom: Power Point at faculty discretion
B. Oxygen
C. Medications
D. Positioning
E. Intraaortic balloon pump
F. Transfusions
GENERAL GUIDELINES PRIOR TO STARTING ANY PROCEDURE

* 1. Check physician/health care provider orders/
* 2. Wash your hands.
  3. Organize your equipment.
* 4. Identify patient.
* 5. Introduce yourself
* 6. Explain procedure to patient.
* 7. Provide for privacy.
  8. Raise the bed to a working level.
  9. Position patient as needed.
 10. Maintain safety.
  11. Perform procedure.
  12. Observe patient's response.
  13. Wash your hands.

* Must be stated prior to starting validation procedure
**PROCEDURE** | **SATISFACTORY** | **UNSATISFACTORY** | **COMMENTS**
---|---|---|---
**TRACHEOSTOMY CARE WITH SUCTIONING**
1. Check physician's order.
2. Assemble equipment: suction machine, suction kit, normal saline, hydrogen peroxide, disposable inner cannulas, clean gloves, sterile 4x4's/sterile Q-tips, trach dressing gauze.
3. Wash hands.
4. Identify patient and explain procedure.
6. Auscultate lungs.
7. Turn on suction machine and check for suction pressure.
8. Open suction kit and set up sterile field.
9. Pour saline into sterile cup.
10. Don sterile gloves (one hand will be sterile, the other clean).
11. Attach catheter to suction tubing.
12. Test patency of suction catheter with saline in cup.
13. Suction inner cannula, assess patient and provide supplemental O₂ as necessary.
14. Remove trach dressing.
15. Discard catheter, gloves and cup.
16. Apply clean gloves.
17. Open box containing sterile inner cannula.
18. Remove patient's inner cannula by squeezing wings of inner cannula.
19. Pick up new inner cannula by wings and insert into trach tube and lock.
20. Pour 1/2 parts N/S and H₂O₂ into sterile container.
21. Open sterile 4x4's and Q-tips.
22. Open trach dressing gauze.
23. Cleanse around stoma with Q-tips touching handle of Q-tips only. Dry with 4x4.
24. Slide new dressing under trach.
25. Auscultate lungs.

In addition to the above procedure, patients on ventilators also have inline suctioning performed.
<table>
<thead>
<tr>
<th>Scores</th>
<th>Documents Nurses Communication</th>
<th>Documents Patients Communication</th>
<th>Evaluates Communication Techniques</th>
<th>Evaluates Interaction</th>
</tr>
</thead>
</table>
| 4      | - Includes exact words and silences  
- Details non-verbal behaviors  
- Demonstrates correct use of therapeutic communication techniques | - Includes exact words and silences in detail  
- Details all non-verbal behaviors | - Names each communication technique  
- Identifies technique as therapeutic or non-therapeutic  
- Selects correct (alternative) therapeutic technique | - Evidences insight into the themes (overt/covert) of the interaction  
- Discusses thoughts and feelings in response to patient  
- Notes areas needed to improve therapeutic communication skills |
| 3      | - Paraphrases words  
- Includes some evidence of nonverbal communication and use of therapeutic communication techniques | - Paraphrases words  
- Includes some evidence of non verbal behaviors | - Incorrectly names more than 2-3 technique(s),  
- Incorrectly cites more than 2-3 technique as therapeutic /non therapeutic  
- alternative technique(s) are limited | - Discusses overt themes but demonstrates limited insight into covert themes  
- Limited references to own thoughts and feelings in response to patient  
- Limited discussion of areas needed to improve communication skills |
| 2      | Documentation is sparse, vague or incomplete | Documentation is sparse vague or incomplete | Multiple incorrect naming of techniques and citing as therapeutic or non therapeutic and no alternatives techniques provided or those provided are incorrect | Limits evaluation to superficial analysis of content; minimal references to thoughts and feelings about 1:1 and/or no discussion of areas needed for improvement |
| 1      | Documentation is sparse, vague or incomplete and no evidence of any non verbal behaviors | Documentation is sparse, vague incomplete and no evidence of any non verbal behaviors | No correct techniques named , no citing of therapeutic or non therapeutic and no alternative techniques provided | Superficial analysis of content, no references to thoughts and feelings about 1:1 and/or no discussion of areas needed for improvement, not expected minimum of 5 minute transcription |

**PROCESS RECORDING RUBRIC-11/07**
### NCP RUBRIC

Sample individual NCP Grading (Maximum Grade=60 points=100%)
SCA/SCD=6, Nursing Diagnosis=8, Goal=7, Interventions=9, Rationales=9, Evaluations=7,
Total=46/60=76.66 percent

<table>
<thead>
<tr>
<th>Points Assigned</th>
<th>IDENTIFIES SCA/SCD’S</th>
<th>FORMULATES NURSING DIAGNOSIS</th>
<th>IDENTIFIES PATIENT OUTCOMES</th>
<th>SELECTS APPROPRIATE INTERVENTIONS</th>
<th>STATES REFERENCED RATIONALES</th>
<th>EVALUATIONS</th>
</tr>
</thead>
</table>
| 8-10            | Includes ALL relevant assessment data with attention to:  
● Subjective data (BCFs)  
● Objective data (checklist)  
● Vital signs  
● Lab values  
● Behavioral and verbal cues Related to the specifically identified USCR and nursing diagnosis  
● Selects priority nursing diagnosis (es) from NANDA list accurately reflecting patient assessment in the PES format.  
● All 3 elements from PES are correctly stated.  
● Medical diagnosis is not used in the nursing diagnosis.  
● Nursing diagnosis identifies a problem that nursing can correct.  
● Clearly states one or two measurable, realistic and appropriate outcomes that reflects resolution of the stated problem.  
● Includes all (5 minimum) interventions required to treat problem. Interventions are:  
● Timed when appropriate  
● Realistic  
● Include assessment actions  
● Reflects independent and collaborative treatment/care actions  
● Documents teaching actions  
● Identifies interventions that may be delegated and to appropriate caregiver (NA, LPN)  
● Documents scientific principles, theories or concepts underlying nursing interventions.  
● Documents the source with author, page number. Full citation on NCP cover.  
● Rationales explain how the action resolves the problem.  
● Documents findings related to the intervention including:  
● Assessment data  
● Vital signs  
● Teaching  
● Labs  
● Comfort and care  
● Patient response to each intervention  
● Proposes alternate actions for unmet goals or ineffective interventions. |
| 5-7             | Includes some relevant, but not complete assessment data as related to the identified USCR and nursing diagnosis  
3 of 4 criteria present as stated for 4 above  
Goal non-measurable, or not realistic  
Priority actions omitted, actions are not timed when appropriate. Either assessment, care or teaching actions omitted. I.D. actions that may be delegated doesn’t designate appropriate caregiver  
Scientific rationales are broad, limited scientific theory, limited reflection of underlying patho-physiology.  
The majority of the interventions are implemented with findings documented. Patient response to interventions inconsistently documented. |
| 2-4             | Assessment data sparse, irrelevant, and incomplete  
2 of 4 criteria present as stated for 4 above  
Goal does not reflect stated problem.  
Interventions are sparse, priority interventions omitted, not timed, and reflect only assessment or care or teaching. Incorrectly delegates action.  
Rationales are general, generic, without a scientific basis, no documentation of sources evident.  
More than half of stated interventions not implemented. Either ability to implement and or patient response omitted. General evaluation given for all actions. |
| 0-1             | No or minimal assessment data present for the identified USCR/nursing diagnosis  
1 of 4 criteria present as stated for 4 above  
Goal not stated and/or without any relevance. Goal not measurable.  
No interventions stated or interventions omitted, interventions do not treat stated problem, or not timed, attend to only one category of assessment, care, or teaching. No mention of delegation.  
Rationales omitted, non scientific, no documentation of sources evident.  
Interventions not evaluated or limited evaluation documented. No reflection of assessment, care or teaching evident. |
Essential Clinical Behaviors

THE FOLLOWING IS A LIST OF NECESSARY NURSING BEHAVIORS APPLICABLE TO CLINICAL SETTINGS. THIS IS NOT A COMPLETE LIST! THESE ESSENTIAL CLINICAL BEHAVIORS ARE IN ADDITION TO ADEQUATE THEORY AND SKILLS PREPARATION FOR CLINICAL, TO APPROPRIATE NURSING CARE PLAN FORMULATION AND TO ACCEPTABLE IMPLEMENTATION AND EVALUATION OF NURSING CARE.

- Correct patient identification maintained
- Bed in lowest position when leaving patient, locked, and appropriate side rails
- Call bell and bedside table (with phone) within reach
- Restrain protocol followed
- Appropriate precautions maintained (standard/isolation)
- Skin integrity protected and proper alignment maintained
- Changes in a patient’s clinical status will be monitored and reported promptly to the clinical instructor and the clinical staff
- Any change of status reported immediately
- Assesses all prescribed therapeutic devices
- Identifies the appropriate assessment parameters prior to medication administration
- More than 2 clinical absences will result in a clinical failure. Exceptional circumstances for clinical absences may be reviewed by the clinical instructor, team, and Program Director at the request of the student.
- A “U” (unsatisfactory) on any section of the Final clinical evaluation too will result in a clinical failure.

Clinical Practice
1. Provides care based on Orem’s self-care model to adult individuals with deficits in USCR’s.
   a. Completes an accurate and thorough patient assessment of the Basic Conditioning Factors (BCF) identifying self-care agency (SCA) and self-care deficits (SCD) in a timely manner.
   b. Distinguishes normal from abnormal assessment findings
   c. Identifies and reports changes from patient’s baseline in a timely manner
   d. Verbalizes the scientific rationale for nursing interventions
   e. Develops goals in collaboration with patient/significant other
   f. Protects patient from physical jeopardy (any action or inaction on the part of the student)
which threatens patient physical well-being).

g. Protects patient from emotional jeopardy (any action or inaction on the part of the student which threatens the emotional well-being of the patient)

h. Administer medications according to nursing standards, agency protocol and patient safety goals, including accurate and timely documentation.

i. Identifies relevant diagnostic tests and lab data reflecting underlying pathophysiology

j. Prioritizes nursing interventions to assist patients in meeting self-care needs or deficits.

<table>
<thead>
<tr>
<th><strong>Human Development</strong></th>
<th>Midterm</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Provides nursing care according to each individual's developmental capabilities</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>a. Provides care based on the uniqueness of the patients cultural and spiritual needs.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>b. Identifies personal biases that may impact nursing care.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>c. Implements care based on patients age, developmental level, or disability</td>
<td>S</td>
<td>U</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Communication</strong></th>
<th>Midterm</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Employs therapeutic and professional communication techniques when interacting with adults and health team members.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>a. Focuses on patient centered communication, goals, and concerns.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>b. Uses language consistent with patient's level of understanding.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>c. Demonstrates respect for the values, dignity, and culture of others in patient interactions.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>d. Reports pertinent data to staff and instructor in a timely manner.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>e. Demonstrates documentation that is accurate, complete, current, concise and organized.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>f. Demonstrates verbal shift report that is complete, appropriate and accurate.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>g. Asks pertinent questions related to patient condition and care.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>h. Actively contributes relevant information in clinical conference.</td>
<td>S</td>
<td>U</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Knowledge</strong></th>
<th>Midterm</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Provides nursing care based upon biological, psychological, sociological, cultural, spiritual and economic factors that influence the health of adults.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>a. Correlates scientific theory with clinical practice.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>b. Integrates prior and current learning with clinical practice</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>c. Maintains proficiency in previously learned skills.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>d. Implements skills according to evidence based standards, policies, and current National Patient Safety Goals.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>e. Differentiates appropriate unlicensed assistive personnel responsibilities.</td>
<td>S</td>
<td>U</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Professional Development</strong></th>
<th>Midterm</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Selects activities which support personal, professional and educational development.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>a. Seeks assistance appropriately from instructor, peers, and other professionals.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>b. Acts on constructive feedback to improve clinical performance.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>c. Plans clinical time to ensure safe, efficient patient care</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>d. Manages time effectively to complete clinical assignments</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>e. Arrives on time and prepared to practice for all clinical activities.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>f. Complies with dress code and grooming standards for clinical practice.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>g. Demonstrates professional demeanor in interactions with patients.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>h. Utilizes appropriate materials as sources of information.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>i. Demonstrates awareness of need for areas for self-improvement.</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>j. Demonstrates initiative by seeking opportunities for new learning.</td>
<td>S</td>
<td>U</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Professionalism</strong></th>
<th>Midterm</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
   b. Maintains confidentiality and adheres to Health Insurance Portability and Accountability Act (HIPAA).

7. Applies skills in nursing care through the use of a variety of technological resources.
   a. Locates technological resources for the improvement of patient care.
   b. Obtains data from technological resources for the improvement of patient care.

8. Utilizes critical thinking when providing nursing care to adults.
   a. Demonstrates self-direction and critical thinking skills in clinical practice.
   b. Employs evidence based practice to modify interactions based on assessment of patient SCA’s and SCD’s.

9. Correctly calculates drug and solution medication problems according to the level 2 Pharmacological Math Computation Exam (PMCE) blueprint.
   a. Calculates prescribed drug dosage correctly.
   b. Calculates IV flow rate accurately and monitors infusion rate correctly.

10. Implements a teaching plan based on knowledge of teaching and learning principles.
    a. Employs the supportive educative role while addressing an identified learning need with the patient or significant other.

The student signature on the evaluation form acknowledges review of the evaluation with the instructor.

<table>
<thead>
<tr>
<th>Mid-Course Evaluation</th>
<th>Final Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Signature and comments</td>
<td>Student Signature and comments</td>
</tr>
<tr>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Signature and comments</td>
<td>Faculty Signature and comments</td>
</tr>
<tr>
<td>Date</td>
<td>Date</td>
</tr>
</tbody>
</table>