

**CERRITOS COLLEGE HEALTH OCCUPATIONS DIVISION
NURSING DEPARTMENT**

**NURSING 212
MEDICAL – SURGICAL NURSING 1**

**Course Packet
Fall 2008**

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N212: Medical Surgical Nursing 1 Course Packet

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N212: Medical Surgical Nursing 1 Course Packet

CERRITOS COLLEGE

Norwalk, California

COURSE OUTLINE

NURSING 212

MEDICAL-SURGICAL NURSING 1

Approved by the Curriculum Committee on: February 14, 2008

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Revised/reviewed: 12/9/99, 05/04/00, 12/24/01, 10/10/02, 2/26/04, 10/14/04, 10/12/06, 2/14/08

Content review: 12/9/99, 2/14/08

N212: Medical Surgical Nursing 1 Course Packet

I. Catalog description

A. Course description

The focus of this course is on the theory and clinical application of the Nursing Process based on the Roy Adaptation Model when providing care for acutely ill medical-surgical patients with specific conditions. Adult physical assessment skills continue to be applied to patients in an acute care setting. The student must receive a grade of “C” or higher in the lecture component and a satisfactory grade in clinical lab in order to pass the course

B. Class hours: 2.5 lecture/7.5 lab

Units: 5.0

C. Prerequisite: NRSNG 210 with a grade of Pass or “C” or higher. For Option B students: Possession of an active Licensed Psychiatric Technician license and admission to the Nursing Program.

Corequisite: NRSNG 211 may be taken prior to admission or concurrent with first semester of admission. Courses must be completed with a grade of Pass or “C” or higher to progress to the second semester.

D. Recommendation: NRSNG 213A or NRSNG 200 or equivalent with grade of Pass or “C” or higher.

II. Texts and other instructional materials

A. Required texts

Cerritos College Nursing Department Student Handbook.

Gulanick, Meg, et.al., Nursing Care Plan – Nursing Diagnosis and Intervention. 5th edition. St. Louis: Mosby, 2003

Ignatavicius, Donna. Medical Surgical Nursing: Critical Thinking for Collaborative Care. 5th edition. St. Louis: Elsevier, 2006

Ignatavicius, Donna. Virtual Clinical Excursions, 3.0. 5th edition. St. Louis: Elsevier, 2005

Jarvis, Carolyn. Pocket Companion for Physical Examination and Health Assessment. 4th edition. Philadelphia: Saunders, 2004

Lippincott. Chart Smart: A-Z Guide to Better Nursing Documentation. 2nd ed. Philadelphia: Lippincott, 2006

Mosby’s Medical Nursing and Allied Health Dictionary. 6th edition. St. Louis: Mosby, 2002

Pagana, Kathleen and Timothy Pagana. Mosby’s Manual of Diagnostic and Laboratory Tests. 2nd edition. St. Louis: Mosby, 2002

Porth, Carol M. Essentials of Pathophysiology: Concepts of Altered Health States. 2nd ed. Philadelphia: Lippincott, 2007

Porth, Carol M. Study Guide to Accompany Porth’s Essentials of Pathophysiology. 2nd ed. Philadelphia: Lippincott, 2007

Skidmore-Roth, Linda. Mosby’s Drug Guide for Nurses. 7th edition. St. Louis,: Mosby, 2007

Sloper, Mary, and Catherine Thompson, Editors. Application of the Roy Adaptation Model Into Nursing Practice. Mount St. Mary’s College, Department of Nursing, 1996.

II. Texts and other instructional materials continued

B. References

- Adams, Michael. Pharmacology for Nurses – A Pathophysiologic Approach. Upper Saddle River: Prentice Hall, 2005
- Cataldo, Corinne, Linda DeBruyne, and Eleanor Whitney. Nutrition and Diet Therapy. 6th edition. Belmont: Wadsworth, 2003
- Jarvis, Carolyn. Physical Examination and Health Assessment. 4th edition. Philadelphia: Saunders, 2004
- Marieb, Elaine N. Human Anatomy and Physiology. 4th edition. Redwood City: Cummings, 2004
- Roy, Sister Callista, and Heather Andrews. The Roy Adaptation Model. 2nd edition. Stamford: Appleton, 1999
- Smith, Sandra. Clinical Nursing Skills: Basic to Advanced. 6th edition. Upper Saddle River: Prentice Hall, 2004
- Current articles and additional references may be assigned by instructor.

C. Required materials

- Nursing packet (course syllabus)
- Uniform
- Watch with second hand
- Stethoscope
- Bandage scissors
- First year name pin and Cerritos College picture identification badge

III. Course content as guided by the NLN Educational Competencies

A. Professional behaviors

B. Communication

1. Patient teaching modalities and strategies
2. Human sexuality issues

C. Critical thinking and decision making

D. Applying the Nursing Process and the Physiological Mode of the Roy Adaptation Model

1. Oxygenation-gas transport
 - a. Review of anatomy and physiology
 - b. Physical assessment
 - c. Diagnostic tests
 - (1) RBC
 - (2) WBC
 - (3) Hemoglobin and hematocrit
 - (4) PT, PTT, INR
 - d. Congestive heart failure
 - (1) Pathophysiology
 - (2) Assessment
 - e. Chest pain
 - (1) Angina
 - (2) Pericarditis
 - (3) Myocardial infarction

III. Course content continued

2. Oxygenation-gas exchange
 - a. Review anatomy and physiology
 - b. Assessment
 - c. Diagnostic tests
 - (1) Bronchoscopy
 - (2) Thoracentesis
 - (3) Chest x-ray
 - (4) Sputum specimen
 - (5) Pulse oximetry
 - (6) Pulmonary function tests
 - d. Skills
 - (1) Oxygen delivery and monitoring
 - (2) Oral and nasopharyngeal suctioning
 - e. Pneumonia
 - (1) Pathophysiology
3. Nutrition
 - a. Gastrointestinal
 - (1) Review anatomy and physiology
 - (2) Assessment
 - b. Diagnostic tests
 - (1) Endoscopy
 - (2) Radiological studies
 - (a) Upper GI series
 - (b) Small bowel series
 - (c) Barium swallow
 - (3) Stool specimen
 - c. Hiatal hernia
 - d. Gastroesophageal reflux disease
 - e. Peptic ulcer disease
 - f. Gastritis
4. Activity and rest
 - a. Musculoskeletal
 - (1) Review of anatomy and physiology
 - (2) Assessment
 - b. Diagnostic tests
 - (1) X-ray
 - (2) Bone density
 - c. Osteoporosis
 - d. Traction
 - e. Casts
 - f. Hip fractures
5. Protection
 - a. Preoperative care
 - b. Intraoperative care
 - (1) Role of the RN

III. Course content continued

- (2) Types of anesthesia
- c. Postoperative care
 - (1) Complications
 - (2) Prevention measures
- 6. Sensation—pain
 - a. Assessment
 - (1) Physiological aspects
 - (2) Psychosocial/cultural aspects
 - b. Pain theory
 - c. Management
 - (1) Pharmacological
 - (2) Nonpharmacological
- 7. Sensation—neurological
 - a. Review of anatomy and physiology
 - b. Assessment
 - c. Diagnostic tests
 - (1) EEG
 - (2) CT/MRI
 - (3) Lumbar puncture
 - (4) Carotid ultrasound
 - (5) Cerebral angiogram
 - d. Increased intracranial pressure
 - e. Cerebral vascular accident
 - (1) TIA
 - (2) Hemolytic
 - (3) Ischemic
 - (4) Surgical interventions
 - (1) Carotid endarterectomy
 - f. Seizure
- 8. Fluid and electrolytes
 - a. Review of fluid balance physiology
 - b. Fluid volume deficit
 - c. Fluid volume overload
 - d. Intravenous therapy
 - (1) Assessment
 - (2) Types
 - (a) Solutions
 - (b) Access devices
 - (3) Complications
 - (4) Skills
 - (a) IV monitoring
 - (b) Calculation of flow rate
 - (c) Discontinuing an IV
 - e. Electrolytes
 - (1) Review of normal electrolyte balance

III. Course content continued

- (2) Imbalances
 - (a) Sodium
 - (b) Potassium
 - (c) Chloride
 - (d) Calcium
 - (e) Magnesium
 - (f) Phosphorus
 - 9. Endocrine—diabetes mellitus
 - a. Review of anatomy and physiology
 - b. Diagnostic tests
 - (1) Oral glucose tolerance test
 - (2) Fasting and random (casual) blood glucose
 - (3) Glycosylated hemoglobin (HgA1C)
 - c. Complications
 - (1) Acute
 - (a) Hypoglycemia
 - (b) Hyperglycemia
 - (2) Chronic
 - d. Care of patient with diabetes mellitus
 - E. Applying the Nursing Process and the Psychosocial Mode of the Roy Adaptation Model
 - 1. Sexuality
 - a. Age related changes
 - b. History taking
 - c. Values/beliefs
 - d. Affect from medications
 - F. Caring interventions
 - G. Teaching and learning
 - 1. Patient health teaching
 - H. Clinical Skills
 - 1. Medication administration
 - a. Five Rights
 - b. Nursing responsibilities
 - c. Techniques by various routes
 - 2. Oxygen administration
 - 3. IV therapy monitoring
 - 4. IV calculations
 - 5. Oral and nasopharyngeal suctioning
 - 6. Medication dosage calculation
 - I. Managing care and collaboration
- IV. Course objectives
- A. Lecture objectives
 - Upon completion of studying this content, the student will be able to:

IV. Course objectives continued

1. Discuss the pathophysiology and application of the Nursing Process to the care of patients with congestive heart failure, pneumonia, diabetes mellitus, hiatal hernia, gastrointestinal reflux disease, peptic ulcer disease, gastritis, traction, casts, hip fracture, stroke, and seizures
2. Compare and contrast the diagnostic tests discussed as applied to disease processes and the related nursing implications
3. Discuss and apply concepts related to pain management, medication administration, fluid and electrolytes, pre- and post-operative care, oxygen administration and suctioning, intravenous therapy calculation and monitoring and human sexuality
4. Recognize and apply concepts related to patient health teaching to include readiness assessment, appropriate techniques and strategies and effectiveness of intervention
5. Discuss pharmacological and nonpharmacological therapy related to the nursing care of patients with musculoskeletal and gastrointestinal disorders, diabetes mellitus, and management of pain
6. Discuss the affect of age, culture, or religious beliefs on the nursing care of patients with medical-surgical diagnoses

B. Clinical objectives

1. Critical clinical competencies
 - a. Demonstrate safe practice of designated nursing skills
 - b. Provide for physical safety of patient
 - c. Protect patient from emotional harm
 - d. Seek assistance from instructor or other healthcare member for care which is beyond the student's level of knowledge or experience
 - e. Call attention to own errors and report situation accurately
 - f. Maintain confidentiality
 - g. Comply with college and agency policies and procedures
 - h. Submit required graded papers
 - i. Pass medication calculation exam
2. Course specific objectives
 - a. Professional behaviors
 - (1) Complies with college, nursing department, and facility regulations and policies
 - (2) Arrives at clinical on time and prepared. Submits all assignments within designated time frame, including referrals and make-up assignments
 - (3) Notifies instructor when late or unable to attend clinical
 - (4) Demonstrates responsibility and accountability for one's actions
 - (a) Calls attention to errors and reports situations to clinical instructor
 - (b) Reports unsafe practices
 - (c) Maintains professional boundaries in the nurse-client relationship
 - (5) Practices within guidelines of NRSN 210
 - (a) Individual knowledge and expertise

IV. Course objectives continued

- (b) Seeks assistance for care beyond level of knowledge
- (6) Abides by HIPPA standards
- (7) Follows universal precautions
- (8) Demonstrates professional behavior such as attitude, punctuality, behavior and appearance (follows dress code)
- b. Communication
 - (1) Communicates verbally in a clear and concise manner in English
 - (2) Writes in a clear and concise manner in English
 - (3) Utilizes therapeutic communication when interacting with patients, family, and significant others
 - (4) Documents and communicates patient assessment, interventions, and evaluation of care verbally and in writing using appropriate medical terminology
 - (5) Communicates effectively with the healthcare team, providing patient updates in a timely manner to staff nurse and instructor
- c. Critical thinking and decision making
 - (1) Makes clinical judgment decisions to ensure accurate and safe care
 - (2) Prioritizes care based on actual clinical situation(s) encountered
 - (3) Demonstrates verbal and written ability to apply theory to clinical situations and state scientific rationale
 - (4) Demonstrates application of prior and current learning
 - (5) Demonstrates appropriate problem solving
- d. Nursing process
 - (1) Utilizes appropriate sources to elicit data about the patient
 - (2) Collects and organizes data in all four modes of the Roy Adaptation Model recognizing the biopsychosocial nature of the patient
 - (3) Demonstrates ability to accurately perform and document physical assessment
 - (4) Performs an environmental assessment
 - (5) Identifies appropriate nursing problems
 - (6) Formulates patient-specific nursing diagnoses using North American Nursing Diagnosis Association (NANDA)
 - (7) Develops patient-specific outcomes
 - (8) Develops patient-specific interventions
 - (9) Correctly evaluates patient response to care and revises patient care as needed
 - (10) Revises care as indicated following evaluation of outcomes
 - (11) Organizes plan of care and prioritizes total patient care for one to two patients
 - (12) Completes the nursing care plan (NCP)/concept map with 75% or higher
- e. Caring interventions
 - (1) Assists the patient to obtain optimum comfort and functioning

IV. Course objectives continued

- (2) Provides a safe physical and psychological environment protecting the patient from undue harm, maintaining dignity and respect
 - (3) Identifies and honors the emotional, cultural, and spiritual influences on the patients' health
 - (4) Adapts care considering the patient's values, customs, culture, and/or habits when possible
 - (5) Advocates for the patient
 - (6) Demonstrates empathy when providing nursing care
- f. Teaching and learning
- (1) Provides simple explanations and instruction to patients
 - (2) Instructs the patient prior to interventions and procedures
 - (3) Identifies patient's knowledge level and readiness to learn
 - (4) Modifies teaching according to patient needs
 - (5) Documents and reports patient's response to instruction
- g. Clinical Skills
- (1) Administers medications safely according to NRSNG 212 guidelines and program policies
 - (2) Passes medication calculation exam with 80% or higher
 - (3) Demonstrates safe practice of designated nursing skills in NRSNG 212 in clinical and/or skills lab
 - (4) Seeks out patients that provide varied learning and skills opportunities
- h. Managing care and collaboration
- (1) Works cooperatively with health care team members, peers, and family toward common patient-centered outcomes
 - (2) Manages the patient assignment in an organized and efficient manner completing care within allotted time frame

V. Assignments

- A. Reading
Readings from textbooks as indicated in the study guide
Reading assignments from the course packet
- B. Writing or problem solving or skill attainment
1. Weekly Nursing Process Worksheets (NPW)
 2. Nursing Care Plan (NCP)/Concept Map
 3. Safe clinical performance of skills taught in classroom
 4. Accurate documentation on patient medical record
 5. Student self-evaluation
- C. Critical thinking
1. Collection, analysis, and interpretation of patient care data using RAM
 2. Formulation and implementation of plan of care based on patient care data
 3. Evaluation of patient care outcomes
 4. Differentiation of normal from abnormal findings in the physical assessment of the adult
 5. Calculation of oral and injection medication dosages and intravenous flow rates

N212: Medical Surgical Nursing 1 Course Packet

VI. Methods of instruction may include

- A. Classroom lecture and discussion
- B. Class handouts, bibliography of required and suggested readings
- C. Required and suggested audio visual materials available in the Health Occupations Skills Lab
- D. Demonstration
- E. Structured group experiences
 - 1. Role play
 - 2. Simulations
- F. Clinical practice
- G. Simulated nursing skills laboratory
- H. Written assignments
- I. Tutorial services as needed
- J. Computer-related methods of instruction will be utilized for students with disabilities, as needed

VII. Methods of evaluation

- A. Quizzes on didactic content identified in lecture objectives
- B. Final comprehensive exam on didactic content
- C. Identification of appropriate data on the nursing process worksheet for each patient
- D. Demonstration of physical assessment skills in clinical setting
- E. Preparation for and safe performance of clinical skills in selected clinical agencies
- F. Non-graded Assessment Testing (ATI)
- G. Pass medication calculation exam with 80% or higher
- H. Satisfactory clinical performance based on clinical evaluation tool

VIII. Learning outcomes

1. Students will score at Level 2 proficiency or higher on the ATI Fundamentals Content Mastery Exam
2. Students will score 75% or higher on NCP assignment
3. Students will pass the dosage calculation exam within two attempts.

Signature Page for Study Guide

I have read and clarified the information included in the course study guide and I will be responsible for its content.

Signature

Name printed

Date

Course Syllabus

Required Materials

- Calculator, Penlight, Transparent Ruler, bandage scissors
- Uniform
- First year name pin
- Cerritos College photo badge

Office Hours

All full time faculty are required to maintain and post office hours. Refer to faculty's office doors or website for office hour availability. This time is open for students to make appointments or walk in (if available) for course related assistance.

Attendance

Attendance is required in lecture and control lab. See attendance policy in student handbook.

You are expected to remain in attendance during lecture time, control lab, and clinical. Verify attendance with instructor when tardy, otherwise you will be marked absent on attendance sheet. It is the student's responsibility to notify instructor prior to any absence or tardy for lecture or clinical. Failure to notify instructor of absences or tardiness by not calling may result in failure of clinical component. See clinical objectives under professional responsibility.

As part of your professional behavior, it is an expectation that you will arrive on time for lecture and control lab. Your first tardy, you will be given a written/verbal warning. Your second incident of tardy, you will be given an advisement notice. Your third incident of tardiness, you are at risk of being dropped from the nursing program.

Class Expectations

1. Attendance: see above expectations
2. Class preparation:
 - Complete Study Guides prior to lectures and / or control labs as required
 - Be prepared to take a Pre-test at the beginning of class
 - Missed pretest due to unexcused tardy or absence will result in zero total points for the pretest.
 - If tardy or absent it is your responsibility to call instructor (leave a message) and arrange for missed materials
 - Read assigned material prior to lecture
 - Integrate related material from prerequisite and concurrent courses (pharmacology, anatomy & physiology)
3. Behaviors:
 - Contact instructor early in course if difficulties experienced within course, that is, lack of understanding of material, poor scholastic achievement, etc.
 - Record own quiz grades; be aware of ongoing status in class by calculating own grade.
 - Think before taking action. If unsure, always check with instructor to assure safety.
 - **Review Clinical Objectives and act accordingly.**

Grading Criteria

90-100%= A

80-89% = B

75-79% = C

70-74% = D

69-below= F

- Total points (pretests, exams, and final exam) achieved divided by total points possible= GRADE for COURSE
- 1 point for each pretest
- Pretest points given to students who have taken all pretests (total of 10 points)
- Final exam is **cumulative**.
- Clinical Component: Pass or Fail based on meeting the Clinical Evaluation Objectives.
- Must pass course with minimum grade of C to continue in program.
- The medication dosage calculation exam is a part of the clinical component of this course. The exam is pass/fail, with a pass grade equivalent to a score of 80% or higher. Each student will have the opportunity for one retest to attain a passing score. NO STUDENT may administer medications prior to passing the medication dosage calculation exam

ATI Testing: RN Fundamentals for Nursing 2.1 Proctored Assessment

This 60-item test offers an assessment of the student's basic comprehension and mastery of the fundamental principles for nursing practice. Concepts assessed include: 1) foundations of practice (e.g., growth and development, communication principles, cultural assessment and sensitivity, health promotion and disease prevention principles, client education principles, and professional accountability aspects of the RN role, including scope of practice, legal responsibilities, and ethical principles); 2) basic nursing care (e.g., basic nursing skills and client safety measures); 3) support of the psychosocial needs (e.g., end-of-life, self concept, and stress response); 4) support of physiologic needs (e.g., client assessment and safety precautions during basic nursing procedures); and 5) health assessment (e.g., assessment of vital signs and general and system specific assessments).

A student meeting the criterion established for **Proficiency Level 2** at the recommended cut off score of 41 (68.3%) is fairly certain to meet NCLEX standards in this content area. Proficiency level 2 is the achievement level expected on this exam.

RN Fundamentals for Nursing 2.1 Proctored Assessment
Topic Descriptors

Foundations for Practice

Adolescent Development: Physical Norms
Client Teaching: evaluating motivation
Communication: techniques
Cultural concepts: planning culturally sensitive care
Disease prevention: levels
Health Promotion: recognizing healthful habits
Infant development: physical norms
Leadership and Management: delegating tasks
Legal responsibilities: appropriate action infusion error
Teaching and Learning: Planning client education
Young adult: psychosocial development

Basic Nursing Care

Bed baths: planning client-specific care
Body defenses: understanding barriers
Chain of infection: direct transmission
Immobility: avoiding common positioning problems
Infection control: using precautions
Lifting: Using correct body mechanics
Medical asepsis: handwashing
Mixing insulins: ensuring safety
Nosocomial infections: risk factors
Oral Medication Administration: promoting safety
Parenteral Medications: age-related considerations
Parenteral Medications: indications for Z-track use
Physical restraints: criteria for selection
Pressure Ulcers: promoting healing wet-to dry dressings
Pressure ulcers: wet-to-dry dressings
Range of Motion: appropriate technique
Safety: Guidelines for chemical restraints
Safety: identifying fall risk factors
Wound care: cleansing technique
Wound care: evaluating aseptic technique

Wound dressing changes: promoting comfort
Wound healing: age-related changes
Wound healing: assessing the healing process
Wound healing: understanding the stages

Supporting Psychological Needs

Death: recognition of advanced directives
Death: signs of impending death
Grief: nursing intervention
Self-esteem: recognizing low self esteem
Sexuality: gerontological considerations
Stress response: recognizing signs

Supporting Physiologic Needs

Endotracheal suctioning: client safety
Fluid-Volume deficit: client assessment
Monitoring glycemic control: client goal
Nasogastric tubes: checking for placement
Peristomal skin: risk for breakdown
Postural drainage: promoting effectiveness
Urine specimen: collection

Health Assessment

Abdominal auscultation: abnormal sounds
Bowel sounds: auscultation
General survey: components
Heart sounds: location and interpretation
Lung auscultation: interpreting abnormal sounds
Nail assessment: age-related changes
Sensoriperceptual alteration: age-related vision changes
Vital signs: assessment of blood pressure
Vital signs: assessment of pulse
Vital signs: assessment of respirations
Vital signs: assessment of temperature
Vital signs: orthostatic changes

Quiz Protocol

1. See "Test taking Protocol" in student handbook.
2. Testing is between 9-11 am on Monday mornings. All students must be in the testing room HS 102 by 9:15am. You may not leave testing for any reason.
3. You may write on the tests.
4. **Make sure to put your student ID number on the scantron sheet.**
5. Make sure all stray marks are erased from scantron sheets.
6. Content of quizzes is outlined on quiz schedule. Content is based on lecture objectives and may be based on related material from prerequisite and concurrent courses.
7. If unable to attend a testing session:
 - Student must notify instructor prior to the quiz by calling ext. 3515 or 2566 or call the Health Occupation office at X2551 after 07:30 am, if unable to attend testing session.
 - If the student notifies the instructor prior to the quiz time and the reason for the absence is approved, a make up quiz will be given by the lead instructor at a later date. The type of exam will be at the discretion of the instructor.
 - A student may **only** make-up **one quiz!**
 - An unexcused absence will result in a zero (o) grade for the missed quiz
8. Nursing department statement on honesty in effect. NO electronic devices (cell phones, cameras, pagers) may be on the student's body during testing.

Quiz Review

Quiz review is given the week of the quiz. Quiz questions and answers will be given during this session. The purpose of these sessions is for learning opportunities, it is not for discussion or argument. Any discrepancies should be discussed with the instructor during office hours the week the quiz was given.

- Student report will be printed for the quiz review.
- No writing utensils, no note taking or talking during quiz review.
- Students whose scantrons do not have student ID #s entered will not be allowed to view their scantrons for quiz review. Make an appointment with instructor during office hours to see quiz (within the same week of the quiz review)

Clinical Skills Practice/Testing Guidelines

1. Clinical skills taught during N212 are to be practiced during control lab, AED 90.47 (skills lab) and at home. See general skills lab hours.
2. Sign in on attendance sheet for each control lab to assure you are marked present. Also sign in SL 121 book for AED 90.47 skills lab.
3. Wear your name tag (not photo badge) to control lab and AED 90.47.
4. Bring skill checklist forms, Smith, Duell, & Martin textbook, lecture notes and any related equipment needed for skill testing.
5. Retesting (if indicated) will be arranged with instructor.
6. Control lab is designated for demonstration and practice. It is equivalent to time spent in clinical. No one will leave the lab until lab time is over. When in lab, students are expected to practice and seek assistance with skills.
7. WEAR FULL UNIFORM for all clinical skills days in the skills lab.

Skills Lab Etiquette

- No food or drink in the Skills Lab building.
- **Leave work area neater than you found it: neat, supplies put away, beds neatly made, beds in down position with over bed tables in place and curtains pulled back. This is a professional responsibility.**
- Some equipment is available for check out. See the Skills Lab Coordinator.

Cell phones/ beepers/ pagers

Audible signals from cell phones, beepers or pagers disrupt the educational process. Upon entering class and control lab, cell phones are to be turned off and beepers/pagers set in vibrator mode. Students will not be excused from class in order to respond to electronic summons. Failure to respect this policy will not be tolerated per the "Student Conduct Policy" in the College Schedule of Classes. **CONTINUED DISRUPTION MAY BE GROUNDS FOR DISCIPLINARY ACTION AT THE ADMINISTRATIVE LEVEL.** Students will be immediately sent to the office of the program director or her designee. If a student is "on call" for work the instructor must be informed at the beginning of the course.

No cell phones, beepers or pagers are allowed in the clinical setting. **DO NOT BRING THEM INTO THE CLINICAL SETTING.** If an emergency should arise, family, significant others, school personnel, etc. should contact the Health Occupations Division secretary at (562) 860-2451 ext. 2551. The secretary will forward the information to the faculty who will then notify the student. Students are encouraged to give the college telephone number and secretary extensions to the emergency contact person(s).

CERRITOS COLLEGE -- HEALTH OCCUPATIONS DIVISION
N 212 STUDY SCHEDULE **Fall 2008**

INSTRUCTORS: NATIVIDAD (RN), KNOWLTON (MK), KUSUMOTO (AK), STUART (PS), VOORHIES (AV) VELOZ-RENDON (LVR)
TESTING: Monday 9-11a.m. HS 102 **QUIZ REVIEW:** See Schedule
LECTURE: Monday 12:30-3:00 pm, Thursday 12:30-3:00 pm SL 109
CLINICAL: Tuesday & Wednesday;
 Group 1 = Lab groups A, B & C
 Group 2 = Lab groups C, D, & E
 ATI Testing: SL 110

TUTORIAL: Supervised nursing tutorial (Nursing AED 90.47). Section A for first year students.
ALL STUDENTS MUST ENROLL (See Skills Lab Hours, SL 121,122,123)

TEXT: **BRING Smith, Duell & Martin Textbook TO ALL LABS; Bring Iggy Text to all Lectures**

Week	Monday	Tuesday	Wednesday	Thursday	Fri
1 10/20- 10/24	12:30-3:00 N212 Orientation Lecture: Medication Administration (MK)	7:00-11:00 Acute Care Orientation 12-3: Control Lab SL 105 Group 1: IV Therapy (AK) Group 2: IV Calculations (RN) Groups switch at 1:30	6:50-12:50 Clinical: Buddy with RN 2-4: Control Lab SL 105 Oxygen/Suctioning (PS)	12:30-3:00 Lecture : Medication Administration (MK)	
2 10/27- 10/31	9-11 Dosage Calc Test 12:30-3:00 Lecture: Cardiovascular (RN)	6:50-3:20 Clinical	8:00-12:00 Medication Scenarios SL 121, 122, 123 1-3: Control Lab Human Sexuality (AV)	12:30-3:00 Lecture: Cardiovascular (RN) Dose Calc Quiz Review	

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<p>3 11/3-11/7</p>	<p>9-11 Quiz 1 12:30-3:00 Lecture: Endocrine (RN)</p>	<p>6:50-3:20 Clinical</p>	<p>6:50-12:50 Clinical 2-4: Control Lab SL 105 Med Administration Skills Testing</p>	<p>12:30-3:00 Lecture: Endocrine (RN) Quiz Review</p>	
<p>4 11/10-11/14</p>	<p>Dose Calc retest (2) 12:30-3:00 Lecture: Respiratory (RN)</p>	<p>HOLIDAY</p>	<p>6:50-3:20 Clinical</p>	<p>12:30-3:00 Lecture Perioperative (MK)</p>	
<p>5 11/17-11/21</p>	<p>9-11 Testing-Quiz 2 12:30-3:00 Lecture: Musculoskeletal (MK)</p>	<p>6:50-3:20 Clinical Lab A Scenario Day 12:20-3:20</p>	<p>6:50-3:20 Clinical Lab B Scenario Day 12:20-3:20</p>	<p>12:30-3:00 Lecture: Fluid & Electrolytes (MK) Quiz Review</p>	
<p>6 11/24-11/28</p>	<p>9-11 Quiz 3 12:30-3:00 Lecture: GI Disorders (MK)</p>	<p>6:50-3:20 Clinical Lab F Scenario Day 12:20-3:20</p>	<p>6:50-3:20 Clinical Lab D Scenario Day 12:20-3:20</p>	<p>HOLIDAY</p>	

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<p>7 12/1- 12/5</p>	<p>12:30-3:00 Lecture Pain Management (MK)</p>	<p>6:50-3:20 Clinical Lab E Scenario Day 12:20-3:20</p>	<p>6:50-3:20 Clinical Lab C Scenario Day 12:20-3:20</p>	<p>12:30-3:00 Lecture Pain Management (MK) Quiz Review</p>	
<p>8 12/8- 12/12</p>	<p>9-11 Quiz 4 12:30-3:00 Lecture: Neurological Disorders (RN)</p>	<p>6:50-3:20 Clinical ATI Testing SL 110, SL101 All groups 2:00-3:20</p>	<p>6:50-3:20 Clinical</p>	<p>12:30-3:00 Lecture: Neurological Disorders (RN) Quiz Review</p>	
<p>9 12/15- 12/19</p>	<p>12:30-3:00 Lecture: Patient Teaching Project (RN)</p>	<p>NO Clinical</p>	<p>12:30 Final Exam SL 109</p>		

**CERRITOS COLLEGE
HEALTH OCCUPATIONS DIVISION
N 212 QUIZ SCHEDULE Fall 2008**

MONDAY, 9 to 11 a.m. in HS 102

<u>DATE</u>	<u>EXAM</u>	<u>CONTENT</u>	<u>NUMBERS</u>
10/27		DoseCalc Math (Clinical Component)	P/F
11/3	EXAM 1:	Medication Administration IV Therapy IV Calculations Oxygen Therapy/ Suctioning Cardiovascular System Total Points	40
11/10		DoseCalc Math Retest (Clinical Component)	P/F
11/17	EXAM 2:	Endocrine Respiratory Human Sexuality Perioperative Total Points	40
11/24	EXAM 3:	Musculoskeletal Fluid & Electrolytes Total Points	30
12/8	EXAM 4	Gastrointestinal Pain Management Total Points	30
12/15	Patient Teaching Project		10
	Pretests		10

12/17

COMPREHENSIVE FINAL:

Neurological Disorders
Medication Administration
Cardiovascular
Endocrine
Respiratory
Musculoskeletal
Fluid & Electrolytes
Gastrointestinal
Perioperative
Pain Management
IV Therapy/Calc.
Oxygen Therapy/Suctioning
Human Sexuality

Total Points **60**

TOTAL COURSE POINTS **220**

Reading Assignment for Lecture and Lab content

SDM= Smith, Duell, Martin Clinical Nursing Skills

Iggy= Ignatavicius, Workman Medical-Surgical Nursing

Week	Topic	Reading
1	Medication Administration IV therapy/ IV Calculations Oxygen/ Suctioning	SDM: Ch 18 SDM: Ch 28; course packet section on IV therapy SDM: Ch. 26 (876-879; 884-893; 903-905; 909) Iggy: Ch 31 (544-552; 557-558)
2	Cardiovascular Human Sexuality	Iggy: Ch. 23 (364-367); Ch. 36 (676—688, 696 Table 36-1); Ch. 38 (749-756); Ch. 42 (870-877,881-886) Articles: To be distributed in class
3	Endocrine	Iggy: Ch. 68
4	Respiratory Perioperative Care	Iggy: Ch. 30 (524-528, 538-542); Ch. 34 (633-639) Iggy: Ch 20, Ch 21 (324-332), Ch 22
5	Musculoskeletal Fluid & Electrolytes	Iggy: Ch. 53, Ch 54 (1157-1168), Ch 55 (1189-1190, 1194-1206, 1207, 1226) SDM: Ch. 30 (1182-1188, 1197-1209) Iggy: Ch 14, 15, 16
6	GI Disorders	Iggy: Ch 56, Ch 57 (1248-1250); Ch 58 (1260-1273);Ch 59 (1283-1305)
7	Pain Management	Iggy: Ch 7 SDM: Ch 16

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8	Neurological ATI testing	Iggg: Ch 44 (922-932, 938-945); Ch 45 (950-955); Ch. 48 (1027-1044, 1045-1050) Review ATI Fundamentals book. See course packet for test topic descriptors
9	Teaching Project	SDM: Ch 6

Clinical Folder

The clinical folder is a record of your accomplishments throughout N212
It should consist of the following elements:

1. Facility information and handouts
2. Skills checklists
3. N212 Clinical Evaluations
4. Nursing Process Worksheet (NPW): guidelines, blank copies, examples.
5. All completed NPWs and concept maps
6. Clinical Absence Make-Up Guidelines
7. References: Abbreviations (approved and unapproved)
8. Acute Care Clinical Rotation (Getting Started...How to choose a patient)-next page

Please place in a 1" 3 ring binder.

**N212 Medical Surgical Nursing
Acute Care Clinical Rotation**

Getting started...How to choose a patient

1. Have a blank NPW to fill out when choosing your patient
2. Look through the Kardex to preview the admitting diagnoses for patients. Example of patient info you will find in the Kardex includes patient's name, age, admitting diagnoses, medical history, diet, activity, accucheck, wound orders, NGT feeding, if any, etc. Sometimes the Kardex is not updated so make sure that the info is current by checking them when looking at the physician's orders later from the chart.
3. Once you chose your patient make sure that the patient is on the board. Find the chart for the patient you chose.
4. Go to History and Physical (H&P) to look at the patient's admitting diagnoses under Assessment and Plan (A/P). Your patient may have multiple admitting diagnoses and multiple chronic diagnoses. Under H&P you can also find the following:
 - a. History of present illness (HPI) – summarize this for your NPW
 - b. Medical history
 - c. Physical exam of patient by the admitting physician or consulting physician
 - d. Medications patient is currently taking at home
 - e. Assessment (admitting and chronic diagnoses)
 - f. Plan (treatment plan)
5. You may read the doctor's progress notes (see Progress Notes tab) to see the physician's notes for the day or days before about the patient's condition/progress. Between the H&P and the progress notes, you will be able to obtain the course of events in the hospital. Ask for assistance from your clinical instructor if you are having difficulty with this.
6. Go to "Medications" tab towards the back end of the chart to see the Medication Administration Record (MAR) & medications ordered for the patient. Fill out the Medications portion of your NPW.
7. Note: If you are administering meds this week, you need to ask the nurse for the current MAR after you've written down the meds from the MAR in the chart (which is yesterday's MAR) then compare the old MAR with the current one and add new medications from the new MAR if there is any.
*Also, look under the "Medication Reconciliation" tab to see what home medications the doctor has ordered for the patient to continue in the hospital.
8. Look under Physician's Orders to see the orders the physician has for the patient. You may fill out the treatments portion of your NPW with info you get here.
9. The latest labs for your patient are placed in front of the chart for the physician to see. Write down the patient's latest lab values. If there are no labs in front of the chart, look under "Labs" tab and obtain the latest labs for your patient. Focus on the labs listed in your NPW (normal and abnormal).
10. Reminder: Do your concept maps for each admitting diagnoses and any of the four chronic diagnoses your patient may have.

N212: Medical Surgical Nursing 1 Course Packet

Clinical Absence Make-Up Guidelines

Make-up for any clinical absence in N212:

Clinical Make-up assignment is based on the week of clinical that the absence occurs. If the student misses both days of the same week, the preceding week's assignment is ALSO due.

Workbook assignment from Virtual Clinical Excursions for Medical-Surgical Nursing by Ignatavicius and Workman. Photocopy the completed pages and submit to clinical instructor by due date outlined below.

Week	Assignment
1	Lower back pain Lesson 18 pages 201-206 of workbook
2	HTN Lesson 16 pages 183-192 of workbook
3	Diabetes Mellitus Lesson 24 pages 251-258 of workbook
4	Emphysema and Pneumonia Lesson 13 pages 155-164
5	Fluid Imbalance Lesson 5 pages 67-69 and 71-73 of workbook
6	Perioperative care Lesson 9 pages 107-119 of workbook
7	Pain Lesson 2 pages 41-50 of workbook
8	Osteoarthritis Lesson 10 pages 121-131 of workbook
9	

- If the absence is due to illness, the paper is to be turned in on the Monday after the illness.
- If the absence is due to being sent home, the paper is to be turned in the next day (i.e.: for a Tuesday absence, the paper is due on Wednesday)
- The student may be asked to present the case study in a post conference.

Lecture Learning Outcomes: Medication Administration

After studying this content, you should be able to:

1. Identify the 7 components of a medication order.
2. Recognize the vocabulary associated with drug frequency.
3. Identify the information the student nurse should obtain prior to administration of a drug.
4. Describe the special practices taken to safeguard controlled substances.
5. Discuss the application of the 5 "Rights" to medication administration
6. Select an appropriate syringe and needle for parenteral administration based on principles learned.
7. Describe the steps of medication preparation and post administration.
8. Compare and contrast the techniques for preparing a medication from an ampoule, a vial and a mixed dose of insulin.
9. Describe/demonstrate the procedure for administering medications (PO, ophthalmic, enteral, inhalation, topical, intradermal, subcutaneous, IM, and Z-track).
10. Identify the site (including landmarks), volume and angle of administration of ID, SQ and IM injections.
11. Discuss the indication, technique and benefits of using the Z-track method.
12. Discuss methods which reduce the discomfort of an injection.
13. Identify common medication errors.

N212: Medical Surgical Nursing 1 Course Packet
Lecture Learning Outcomes: Cardiovascular System

After studying this content, you should be able to:

1. Review the anatomy and physiology of the cardiovascular system
2. Identify the cardiovascular changes associated with aging
3. Discuss the purpose, normal values, and significance of abnormal findings for the following diagnostic tests:
 - a. Complete Blood Count (CBC): RBC, Hgb, Hct, WBC (Neutrophils, Basophils, Eosinophils)
 - b. Coagulation: Platelet count, PT, PTT/APTT
 - c. Chest X-ray
4. Describe the following cardinal signs and symptoms of the cardiovascular system and the appropriate nursing assessment for each
 - a. Pain/Discomfort (Chest Pain)
 - b. Palpitations
 - c. Dyspnea
 - d. Edema
 - e. Fatigue
 - f. Syncope
5. Compare and contrast the pathophysiology, signs and symptoms, and treatment of the different types of chest pain (MI, angina, pericarditis)
6. Discuss the etiology and pathophysiology and signs and symptoms of Congestive Heart Failure
7. Discuss the role of Brain Natriuretic Peptide (BNP) in the diagnosis of Congestive Heart Failure
8. Prioritize nursing care for client who is showing s/s of Left sided Heart Failure

Lecture Learning Outcomes: Endocrine

After studying this content, you should be able to:

1. Review anatomy and physiology of pancreatic function
2. Discuss terminology related to diabetes
3. Compare and contrast the pathophysiology and signs and symptoms of Type I and Type 2 diabetes
4. Describe the long-term complications of diabetes and prevention of these complications
5. Describe diagnostic tests, their clinical significance, and related nursing interventions for patients with diabetes
6. Discuss the lifestyle changes (dietary modifications and exercise) necessary for persons with diabetes
7. Identify the teaching needs of Type 1 and Type 2 Diabetic patients
8. Describe the difference in onset, peak and duration of effect among these insulins and their nursing implications
 - a. Lispro, Aspart, Apidra
 - b. Regular (Humulin)
 - c. NPH (Humulin)
 - d. Semi-Lente (Humulin)
 - e. UltraLente (Humulin)
 - f. Lente (Humulin)
 - g. Glargine (Lantus), Detimir (Levemir)
9. Describe the action, and nursing implications of oral antidiabetic agents (first generation, second generation sulfonylureas, meglitinides, biguanides, thiazolidinediones, and alpha-glucosidase inhibitors) and their nursing implications (identify what the nurse should monitor for when a client is taking these agents).
10. Differentiate between hypoglycemia and hyperglycemia; diabetic ketoacidosis, and hyperosmolar nonketotic coma.

After studying this content, you should be able to:

1. Review the anatomy and physiology of the respiratory system
2. Describe the respiratory changes associated with aging
3. Discuss the purpose and interventions (preparation, explanation, procedure, postcare) for the following diagnostic tests:
 - a. X-rays: chest, bronchogram, CT, lung scan
 - b. Direct visualization: bronchoscopy
 - c. Sputum specimen
 - d. Thoracentesis
 - e. Pulmonary function tests (PFT)
 - f. Oximetry
 - g. Magnetic resonance imaging (MRI)
 - h. Cultures
4. Describe the nursing assessment of the following cardinal signs and symptoms:
 - a. cough
 - b. sputum
 - c. dyspnea
5. Discuss the pathophysiology, nursing assessment, interventions, and evaluation for Pneumonia

Lecture Learning Outcomes: Musculoskeletal System

After studying this content, you should be able to:

1. Recall the anatomy and physiology of bone, joints and muscle.
2. Describe how the physiologic changes that occur in the musculoskeletal system with aging affect care of the older adult.
3. Explain the use of laboratory tests and radiological studies with a musculoskeletal problem, the role of the nurse and related patient education.
4. Describe the treatment of soft tissue injuries.
5. Recognize the risk factors for primary and secondary osteoporosis.
6. Describe the role of drug therapy in the prevention and management of osteoporosis.
7. Implement interventions to decrease the risk of developing osteoporosis.
8. Compare and contrast common types of fractures.
9. Discuss the healing process of bone.
10. Describe the usual clinical manifestations that are seen in clients with fractures.
11. Discuss the collaborative management of fractures.
12. Identify common complications associated with fractures.
13. Describe the nursing assessment and interventions for a patient in a cast including patient education.
14. Describe the nursing assessment and interventions for a patient in traction including patient education.
15. Describe the differences in nursing care given to patients with total hip replacement/prosthesis versus hip pinning (ORIF)
16. Describe "hip precautions" for hip prosthesis patients.
17. Identify common nursing diagnoses for patients with musculoskeletal disorder.

Lecture Learning Outcomes: Fluid and Electrolytes

After studying this content, you should be able to:

1. Explain why women and older adults have less total body water than men and younger adults.
2. Interpret whether a client's serum electrolytes are normal, elevated or low.
3. Explain the relationship between antidiuretic hormone, urine output volume, and osmolarity.
4. Analyze a patient's hydration status on the basis of physical assessment findings.
5. Evaluate a patient's food choices for sodium and potassium content.
6. Identify clients at risk for fluid imbalances
7. Use laboratory data and clinical manifestations to assess fluid and electrolyte imbalance.
8. Discuss nursing care for patients with dehydration and overhydration.
9. Identify clients at risk for electrolyte imbalances.
10. Identify appropriate nursing interventions for patients with fluid and electrolyte imbalances.
11. Identify components of a teaching plan for patients with potassium and sodium imbalance.
12. Explain the effects of potassium imbalance on the body and actions of medications.

N212: Medical Surgical Nursing 1 Course Packet
Lecture Learning Outcomes: Gastrointestinal System

After studying this content, you should be able to:

1. Recall the anatomy and physiology of the gastrointestinal (GI) system.
2. Identify GI system changes associated with aging.
3. Evaluate important physical assessment findings in a patient with digestion, nutrition, and elimination (GI) health problems.
4. Explain the use of laboratory testing for a patient with a GI health problem.
5. Describe the use of diagnostic testing for GI problems.
6. Plan preprocedure and follow up care for patients having invasive radiographic and endoscopic procedures.
7. Explain the pathophysiology of gastroesophageal reflux disease (GERD)
8. Identify assessment findings for a patient with GERD
9. Plan the nursing care and teaching components for a patient with GERD.
10. Identify medications that are used for GERD and nursing implications for each classification.
11. Develop a postoperative teaching plan for a patient having a hiatal hernia repair.
12. Compare etiologies and assessment findings of acute and chronic gastritis.
13. Describe the key components of collaborative management for clients with gastritis.
14. Compare and contrast assessment findings associated with gastric and duodenal ulcers.
15. Identify the most common medical complications that can result from peptic ulcer disease.
16. Discuss drug therapy for gastritis and PUD.
17. Develop a teaching plan related to drug therapy for patients experiencing PUD.

Lecture Learning Outcomes: Preoperative and Postoperative Care

After studying this content, you should be able to:

1. Identify personal factors that increase the patient's risk for complications during and immediately following surgery.
2. Identify the components of a preoperative assessment and checklist
3. Identify diagnostic tests that are routinely completed preoperatively.
4. Describe the legal implications and proper procedures for obtaining informed consent.
5. Explain the purposes and techniques commonly used for patient preoperative preparation.
6. Discuss the components and indication for preoperative teaching.
7. Recognize client conditions or issues that need to be communicated to the surgical and postoperative teams.
8. Explain procedures to ensure the identity of the patient and the accuracy of the planned surgical procedure.
9. Identify nursing concerns for management of patients receiving various types of sedation and anesthesia.
10. Describe the ongoing head-to-toe assessment of the postoperative patient.
11. Prioritize nursing interventions for the patient recovering from surgery and anesthesia during the first 24 hours, 48 hours and 72 hours.
12. Prioritize nursing care for the patient who has respiratory depression after surgery.
13. Discuss proper wound assessment, dressing changes and drain management.
14. Recognize wound complications after surgery and appropriate nursing interventions.
15. Recognize common postoperative complications.
16. Discuss ongoing assessments for postoperative complications, interventions to prevent complications and appropriate actions when complications are recognized.
17. Discuss the components of discharge instructions for a postoperative patient.

Lecture Learning Outcomes: Pain Management

After studying this content, you should be able to:

1. Define the concept of pain.
2. Identify populations at high risk for undertreatment of pain.
3. Discuss the attitudes and knowledge of nurses, physicians and clients regarding pain assessment and management.
4. Differentiate between addiction, tolerance and physical dependence.
5. Compare and contrast the characteristics of the major types of pain.
6. Explain the transmission of pain.
7. Discuss the Gate Control theory.
8. Describe the components of a comprehensive pain assessment.
9. Describe the use of non-opioid analgesics in pain management.
10. Discuss and compare opioid analgesics.
11. Discuss the adverse effects of Meperidine.
12. Define equalanalgesic dosing.
13. Explain the purpose of adjuvant medications in pain management.
14. Differentiate four routes of analgesic administration.
15. Program a patient controlled analgesia (PCA) pump correctly.
16. Identify special considerations for older adults related to pain assessment and management.
17. Identify physical and cognitive-behavioral therapies for clients experiencing pain.
18. Develop a teaching/learning plan for managing pain.
19. Describe the role of the nurse in pain management.
20. Discuss the harmful effects of untreated pain.

After studying this content, you should be able to:

1. Compare the functions of the major divisions of the nervous system.
2. Identify common changes in the neurological system associated with aging.
3. Discuss the components of a neurological assessment.
4. Perform a rapid neurological assessment and interpret findings.
5. Identify clinical manifestations of increased intracranial pressure.
6. Identify the common types of stroke and related risk factors.
7. Describe the typical manifestations of stroke.
8. Identify and discuss diagnostic testing and nursing responsibilities related to stroke.
9. Identify collaborative management options and drug therapy used to treat patients with stroke.
10. Prioritize nursing care for a patient with stroke.
11. Discuss the common types of seizures, precipitating factors, and clinical manifestations.
12. Explain the nursing interventions required when caring for a patient at risk for or having a seizure.
13. Identify collaborative management options and drug therapy used to treat patients with epilepsy.

N212: Medical Surgical Nursing 1 Course Packet
Laboratory Learning Outcomes: Intravenous Therapy

After studying this content, you should be able to:

1. Identify various types of IV fluids bags and abbreviated terminology.
2. Describe the nursing assessment when monitoring intravenous infusion and appropriate documentation
3. Discuss the complications of intravenous therapy (phlebitis, infiltration, extravasation) and related nursing interventions
4. Differentiate a primary and a secondary Intravenous infusion
5. Discuss the purpose of a saline lock or heparin lock and indications for use.
6. Correctly calculate IV drip rates using given formulas
7. Describe techniques used to discontinue an infusion device.

Laboratory Learning Outcomes: Oxygen Therapy/ Suctioning

After studying this content, you should be able to:

1. Describe the procedures for respiratory preventive measures (cough and deep breathing, incentive spirometry, chest physiotherapy)
2. Identify the common clinical manifestations indicating inadequate ventilation
3. List the basic information the nurse should know for oxygen administration
4. Describe various devices for oxygen delivery and indications for use
5. Identify the signs of hypoxia
6. Describe the indications for suctioning
7. Identify the signs and symptoms that might indicate the need for suctioning a patient
8. Identify the purpose and describe the procedure for oropharyngeal and nasopharyngeal suctioning
9. Discuss charting responsibilities for suctioning a patient

Laboratory Learning Outcomes: Human Sexuality

After studying this content, you should be able to:

1. List health states (medical/surgical/aging) that may have an influence on the sexuality of the patient.
2. Identify barriers to communication with patients regarding sexuality.
3. Identify your own feelings related to sexuality.
4. Understand the importance of the role of the nurse in assessing the sexuality of patients.
5. Use the acronym PLISSIT to discuss issues of sexuality with patients.
6. Initiate and obtain a sexual history using therapeutic communication techniques.
7. Identify patients who are at risk of developing problems related to sexuality.
8. Develop a plan of care for patients with sexual problems.
9. Access resources to help patients cope with special sexuality issues such as ostomies, spinal cord injuries, surgeries, and cancer treatment.
10. Identify medications that commonly affect sexual function

Patient Teaching Project:

Each group (group of 5 students-divide lab group in 2) will complete a Patient Teaching Project. The grade earned by the group determines the individual grades. The project topic will be randomly drawn from the list below and must be submitted to the faculty prior to beginning the project. Each presentation is limited to 10 minutes.

The Teaching Project must be presented in the form of live role play/skits. Use audio/visual aides (posters, handouts, etc.) and other props (costumes, uniforms) to enhance presentation of content. Be creative!

An outline of the Patient Teaching Project will be submitted to the instructor on the due date. This assignment will be presented by the group on the **final week of N212 (See Study Schedule)**

Patient Teaching Project Guidelines

- Read the chapter readings (SDM: Ch. 6) on Patient/Client Teaching as individuals (not as a group)
- As a group, delegate the tasks and arrange meetings to work on the project.
- Patient Teaching Project should be **Nursing focused** (i.e., majority of teaching provided should be in the role of the Nurse, not physician, radiologist, dietician, pharmacist, etc.)

Patient Teaching Project Requirements:

The **teaching project presentation and outline** should include the following:

1. Develop a **hypothetical** client-to-be-taught (based on topic chosen) and provide a description of client characteristics including details about client variables that may affect the teaching/learning experience.
 - a. learning needs (SDM pp115-116 - content the patient needs to know; learning style; developmental level, literacy level, language barrier)
 - b. readiness to learn (SDM: p. 115- physiologic and psychologic readiness, willingness to make changes and participate, etc.)
 - c. unique socioeconomic, cultural, and ethnic aspects (look at your client's ethnic background and consider any cultural factors that may affect the client's learning and/or health care practices)
2. Identify teaching strategies to be used in your presentation and demonstrate the implementation of the teaching project using the teaching strategies (e.g., demonstration, lecture, video, handouts etc.) appropriate for the patient and situation
3. Include references in your outline – must have at least three sources (e.g., SDM, Iggy, credible internet sites, etc.)

NOTE: #1-3 (above) must be addressed in your presentation and outline to receive full credit under “thoroughness” section of the grading rubric (See Grading Rubric).

N212: Medical Surgical Nursing 1 Course Packet
Patient Teaching Project

Topics to choose from:

1. Teaching insulin injections on a newly diagnosed Type 1 Diabetes Mellitus, 15-year-old male Hispanic patient
2. Providing preoperative teaching to a 53-year-old Asian female patient undergoing a total mastectomy
3. Teaching pain management (including pharmacological and alternative pain management techniques) to a 38-year-old Hispanic male patient with chronic back pain
4. Teaching a Caucasian teenage female patient regarding a new anti-epileptic medication
5. Teaching a 60-year-old Hispanic male patient who underwent a left below-the-knee amputation (BKA) about wound care and dressing change
6. Teaching a noncompliant 48-year-old African American DM Type 2 female patient regarding the long term complications of Diabetes and prevention
7. Teaching a 45-year-old Korean male patient undergoing surgery regarding the prevention of postoperative complications
8. Teaching an 85-year-old patient regarding Pneumonia and the importance of the Pneumonia vaccine
9. Teaching a 62-year-old male cardiac patient regarding the difference between angina attack and a Myocardial Infarction, as well as the action the patient needs to take in the event of an attack (angina or MI)
10. Teaching a 58-year-old male patient who recently started on a heart medication regarding its side effects and how it may affect his sexual drive
11. Teaching a 74-year-old African American patient admitted for dehydration regarding signs and symptoms of dehydration and how to prevent dehydration.
12. Teaching a 56-year old male Chinese client admitted for a stroke regarding lifestyle changes to prevent another stroke.

N212: Medical Surgical Nursing 1 Course Packet
Patient Teaching Project

Tips for group success

- Each group should designate a leader.
- Each group decides on one teaching project.
- All members of the group receive the same grade.
- All members of the group collaborate to complete the various aspects of the teaching project.
- Plan early. Group members are responsible for determining an agreeable schedule, delegating tasks, and distributing workload.
- Develop a project plan with due dates, which group member is responsible what needs to be accomplished, and any questions for the instructor. "Plan the work...Work the plan."
- Since each member of the group will receive the same grade on the patient teaching project, each group member is responsible for overseeing the quality of work of all other team members.
- Make use of all available means of communication--e-mail, chat rooms, telephone, voicemail, fax, in person, etc.
- **DO NOT PROCRASTINATE!** If you wait to put together your teaching project until the last few days before the due date, you will not have enough time to search for and analyze the information you will need to produce a quality final project.
- Practice.
- Have Fun!!!

N212: Medical Surgical Nursing 1 Course Packet
Patient Teaching Project Grading Criteria (10 points)

Oral Presentation Rubric : Patient Teaching Project

Instructor Name: **Rachel Natividad, RN, MSN**

Lab Group: _____

CATEGORY	2	1.5	1	0.5
Content - Accuracy	All content throughout the presentation is accurate. There are no factual errors. Information is shortened to simple phrases.	Most of the content is accurate but there is one piece of information that might be inaccurate. Information is presented in long paragraphs.	The content is generally accurate, but one piece of information is clearly flawed or inaccurate.	Content is typically confusing or contains more than one factual error. There is little or no information.
Props	Group uses several props (could include costume) that show considerable work/creativity and which make the presentation better.	Group uses 1 prop that shows considerable work/creativity and which make the presentation better.	Group uses 1 prop which makes the presentation better.	Group uses no props OR the props chosen detract from the presentation.
Time-Limit	Presentation is 10 minutes long and time used effectively	Presentation is adequate given the use of time (went over or under by 1-3 minutes)	Use of Presentation time is somewhat effective (went over or under by 3-5 minutes)	Inappropriate use of time (went over or under by 5 or more minutes)
Clarity	Content presented clearly in relation to patient's ability to understand information	Content presented somewhat clearly in relation to patient's ability to understand information. Needs few clarifications.	Content not presented clearly in relation to patient's ability to understand information. Needs several clarifications.	Content presented confusing to patient
Thoroughness	Content is presented and explained completely. (All areas of teaching project #1,2,3 addressed thoroughly); includes a thorough outline	Content is presented and explained somewhat completely (Missing some areas (subcontent i.e., #1 a, b, c) of the teaching project), outline missing some areas	Content presentation and explanation incomplete (Missing 1 major area (#1,2,3) of the teaching project); and/or no outline	Lacking in Content presentation and explanation (Missing more than 1 major area (#1,2,3) of the teaching project) ; and/or no outline

Medication Administration Study Guide

1. What are the “five rights”?
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. Right documentation
2. What are the seven components of a medication order?
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 7. _____
3. Before administering medication, what should be checked on the patient’s ID band and what should be asked of the patient?
4. All medications should be locked. TRUE or FALSE
5. Certain drugs, like insulin, heparin or digoxin should be double checked with another nurse. TRUE or FALSE
6. Medications that are frequently used, like inhalers may be left at the patient’s bedside. TRUE or FALSE
7. Medications are automatically continued postoperatively. TRUE or FALSE
8. Medication packages should be opened at the patient’s bedside. TRUE or FALSE
9. What can a medication be mixed with if the pill is crushed and the patient is taking the medication orally?
10. What medications CAN NOT be crushed?
11. What should be documented on the patient’s MAR after administration of an oral medication?
12. Describe the method for administering medications via an NG or enteral tube.
13. When administering topical medications, it is important to wear gloves. TRUE or FALSE
14. What can be done to prevent ophthalmic medications from having systemic effects?
15. How is an ophthalmic medication given?
16. When administering a metered-dose inhaled medication, how would you instruct a patient to self administer?

17. If administering several inhalers, which order of administration should be used?
18. How is administering dry powder inhalers different from propellant based inhalers?
19. How do you know when a medication administered by a nebulizer is finished?
20. What action does the nurse take when the patient reports white patches in mouth after using a MDI?
21. Is it essential to use a safety needle for injections?
22. Identify appropriate administration sites for the following injections

Intradermal	
Subcutaneous	
Intramuscular	

23. The larger the needle gauge, the _____ the needle lumen.
The smaller the needle gauge, the _____ the needle lumen.
24. Which IM injection site is the *preferred site*?
25. When withdrawing medications, which delivery system requires air to be injected first? (vial or ampule)
26. Intradermal injections should be given at _____ angle.
Subcutaneous injections should be given at _____ or _____ angle.
IM injections should be given at _____ angle.
28. During an IM injection, after the needle is inserted in the skin, the plunger is pulled back to _____.
29. When should a “Z-track” injection technique be used?
30. When preparing an insulin injection, which type of insulin (Regular or NPH) should be pulled into the syringe first?

**CERRITOS COLLEGE HEALTH OCCUPATIONS
IV THERAPY Stations**

Use SDM textbook and the IV Therapy Handout from your course packet

Station 1: Solutions

Identify the following solutions and their tonicity.

Solution
1.
2.
3.

Instructor Signature: _____

Station 2: IV Site Assessment

Perform an IV infusion and IV site assessment and document your findings

Documentation 1:

Documentation 2:

Instructor Signature: _____

Station 3: IV Therapy Complications

Identify the following complications of IV therapy and describe nursing interventions for each:

IV Complication	Nursing Intervention

Station 4: IV Equipment

Identify the following IV equipment

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Answer the following questions:

1. How often should the IV tubing be changed?

2. How often should an IV site be changed?

3. How often should an IV dressing be changed?

4. What is the IV solution and what is the infusion rate?

Instructor Signature: _____

Station 5: Show and Tell

Describe the following vascular access/lines and state how these might be different from a peripheral IV line

Central line _____

Port-a cath _____

PICC line _____

IV Flow Rate Calculations

In-Class Exercise: Calculate in mL/hr and gtts/min.

- 1. Calculate the drip rate for 200 mls of IV Fluids to be given over an hour via a giving set which delivers 20 drops/ml.**
- 2. 1 L of Normal Saline is charted over 8 hours. The drop factor is 15. Calculate the number of drops per minute.**
- 3. One and a half L of Normal Saline is required to be given over 12 hours. Using a tubing set which delivers 10 drops/ml how many drops per minute will need to be given?**
- 4. Calculate the drip rate for 2 L of IV Fluids to be given over 10 hours via a tubing set which delivers 15 gtts/ml.**
- 5. Ordered: 1 L of Dextrose 5% in water over 12 hours using a tubing set which delivers 15 drops/mL. Calculate the rate in drops/minute.**
- 6. You are required to administer 250 mls of IV Fluids over 1 hour. The drop factor is 15. How many drops per minute are required to start the flow off at the correct rate?**
- 7. You are required to administer 500 mls of Normal Saline over 4 hours. The drop factor is 20gtts/mL. How many drops per minute are required to start the flow off at the correct rate?**
- 8. Calculate the drip rate for 500 mls of Normal Saline to be given over 8 hours via a giving set which delivers 15 drops/ml.**
- 9. You are required to administer 1 L of Normal Saline over 5 hours. The drop factor is 15. How many drops per minute are required to start the flow off at the correct rate?**
- 10. One L of Dextrose 5% in water is charted over 24 hours. The drop factor is 10. Calculate the number of drops per minute.**
- 11. You are required to administer 3 L of IV Fluids over 24 hours. The drop factor is 10. How many drops per minute are required to start the flow off at the correct rate?**
- 12. Calculate the drip rate for 500 mls of Dextrose 5% in water to be given over 2 hours via a giving set which delivers 15 drops/ml.**
- 13. One and a half L of IV Fluids is prescribed over 8 hours. The drop factor is 15. How many drops per minute are required to start the flow off at the correct rate?**
- 14. Calculate the drip rate for 100 mls of IV Fluids to be given over 1 hour via a giving set which delivers 60 drops/ml.**

15. You are required to administer 1 L of Normal Saline over 6 hours. The drop factor is 20 gtt/mL. How many drops per minute are required to start the flow off at the correct rate?
16. 150 of IV Fluids is charted over 3 hours. The drop factor is 15. Calculate the number of drops per minute.
17. Three L of Lactated Ringer's is charted over 20 hours. The drop factor is 15. The IV has been running for 9 hours. 800 mls remain. How many drops per minute are needed so that the IV finishes in the required time?
18. One L of IV Fluids is charted over 10 hours. The drop factor is 10. The IV has been running for 8 hours and 30 minutes. 100 mls remain. How many drops per minute are needed so that the IV finishes in the required time?
19. 2 L of Normal Saline is charted over 24 hours. The drop factor is 15. The IV has been running for 9 hours and 45 minutes. 500 mls remain. How many drops per minute are needed so that the IV finishes in the required time?
20. One L of Dextrose 5% in water is charted over 7 hours. The drop factor is 10. The IV has been running for 1 hour and 30 minutes. 500 mls remain. How many drops per minute are needed so that the IV finishes in the required time?

IV Flow Rate Calculations: *Take Home Exercises:*

IV Flow Rate Calculations: Calculate flow rate in mL/hr and gtts/min

- 1. The physician orders an IV infusion of D5W 1000 ml to infuse over the next eight hours. The IV tubing that you are using delivers 15gtt/min. What is the correct rate of flow?**
- 2. A patient, admitted with a head injury, has an order for D5NS at 25 ml/hour. The IV tubing has a calibration of 10gtt/ml. What is the correct rate of flow for this patient?**
- 3. Your patient has an order to infuse 100 ml of D51/2NS with 10MEq of KCl over the next thirty minutes. The set calibration is 10gtt/ml. What is the correct rate of flow for this patient?**
- 4. The order reads: "Over the next 4 hours, infuse 500 ml of 5% Dextrose in Normal Saline. Add 20 MEq of KCl to solution." You know that the IV tubing set is calibrated to deliver 10gtt/ml. What is the rate of flow?**
- 5. The 10am medications scheduled for your patient include Keflex 1.5 G in 50 ml of a 5% Dextrose solution. According to the pharmacy, this preparation should be administered in thirty minutes. The IV tubing on your unit delivers 15 gtts per milliliter. What is the correct rate of flow in mL/hr and in drops per minute?**
- 6. The physician orders an IV infusion of D5W 1000 ml to infuse over the next eight hours. The IV tubing that you are using delivers 10 gtt/ml. What is the correct rate of flow (drops per minute)?**
- 7. A patient, admitted with a head injury, has an order to start 1000cc of D5NS at 30ml/hour. The IV tubing has a calibration of 60 gtt/ml. What is the correct rate of flow in gtts/min for this patient?**
- 8. Your patient has an order to infuse 100 ml of D51/2NS with 40 MEq of KCl over the next 60 minutes. The set calibration is 15 gtt/ml. What is the correct rate of flow for this patient?**
- 9. The 10am medications scheduled for your patient include Keflex 2.0 g in 100 ml of a 5% Dextrose solution. According to the pharmacy, this preparation should be administered in thirty minutes. The IV tubing on your unit delivers 10 gtts per milliliter. What is the correct rate of flow?**
- 10. The physician orders 1.5 liters of Lactated Ringers solution to be administered intravenously to your patient over the next 12 hours. Calculate the rate of flow if the IV tubing delivers 20gtt/ml.**
- 11. The physician orders 1.5 liters of Lactated Ringers solution to be administered intravenously to your patient over the next 12 hours. Calculate the rate of flow if the IV tubing delivers 15 gtts per mL.**

12. The physician orders 1.5 liters of Lactated Ringers solution to be administered intravenously to your patient over the next 15 hours. Calculate the rate of flow if the IV tubing delivers 60 gtts/ml.

13. The order reads: "Over the next 4 hours, infuse 500 ml of 5% Dextrose in Normal Saline. Add 20 MEq of KCl to solution." You know that the IV tubing set is calibrated to deliver 15 gtt/ml. What is the rate of flow?

14. On Wednesday afternoon, your patient returns from surgery with an IV fluid order for 1000cc every 8 hours. On Thursday morning at 8am, you assess that 650 ml of a 1L bag has been absorbed. The physician orders the remainder of that bag to infuse over the next 6 hours. You know that the IV tubing used by your unit delivers 10 gtt/ml. What will the correct rate of flow be?

15. The physician reduces an IV to 30ml/hour. 300 ml are remaining in the present IV bag. You notice that it is exactly 10:30 am. At what time will the infusion be completed?

N212: Medical Surgical Nursing 1 Course Packet
OXYGEN THERAPY
Cerritos College Nursing Department
N 212

Station I

State 4 indications for the use of Oxygen

- 1.
- 2.
- 3.
- 4.

Identify the following methods of oxygen administration, flow rates, usage and state nursing interventions and rationale of each.

Demonstrate correct usage for each

Nasal cannula

Flow rates

Usage

Intervention:

Rationale:

Simple oxygen mask

Flow rates

Usage

Intervention:

Rationale:

Non-rebreather mask

Flow rates:

Usage:

Intervention:

Rationale:

Venturi mask

Flow rates:

Usage:

Intervention:

Rationale:

Face tent

Flow rates:

Usage:

Intervention:

Rationale:

Trach Collar

Flow rates:

Usage:

Intervention:

Rationale:

Station II

State 8 safety precautions for oxygen administration

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

State 6 complications of oxygen therapy

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

State 9 signs of early hypoxia

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.

State 4 advanced signs of hypoxia

- 1.
- 2.
- 3.
- 4.

Station III

What is the purpose of pursed lip breathing?

Identify 3 techniques for teaching it

- 1.
- 2.
- 3.

Who is helped by this type of breathing?

Identify and demonstrate the procedure for using an incentive spirometer

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

What are the primary advantages of pulse oximetry?

- 1.
- 2.
- 3.
- 4.

Demonstrate the procedure for using pulse oximetry

Station IV

What are the objectives of chest physiotherapy (CPT)?

- 1.
- 2.
- 3.
- 4.
- 5.

Demonstrate (on a partner) CPT

1. Postural drainage
2. Chest percussion
3. Chest vibration

N212: Medical Surgical Nursing 1 Course Packet
SUCTIONING
Cerritos College Nursing Department
N 212

Station V

Identify 4 indications for suctioning

- 1.
- 2.
- 3.
- 4.

Identify 2 unexpected outcomes from suctioning and ways to avoid them

- 1.
- 2.

What documentation is needed for suctioning?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Station VI– Demonstration with faculty

Identify the equipment needed for suctioning

1. Suction unit (portable or wall)
2. Suction catheter (Yankeur) or suction kit

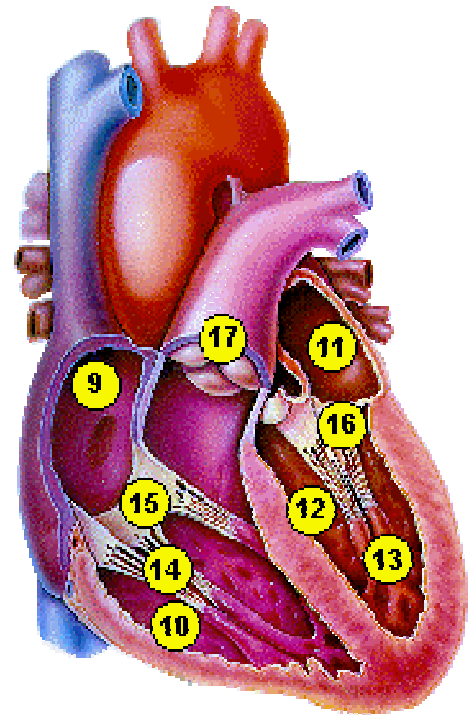
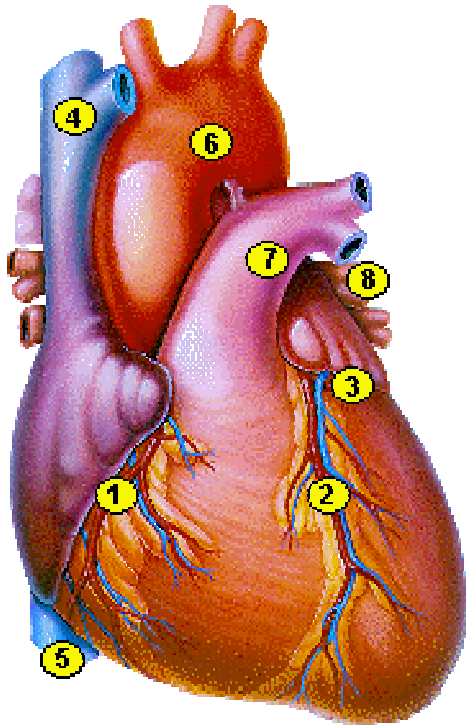
Faculty to demonstrate:

Oral, oropharyngeal and nasopharyngeal suctioning using catheter and gloves

Station VII – Suctioning Practice

Review the Anatomy and Physiology of the Cardiovascular System

Identify the following structures and their functions:



Structure	Function	Structure	Function
1. .		10..	
2. .		11..	
3. .		12..	
4. .		13..	
5. .		14..	
6. .		15..	
7. .		16..	
8. .		17..	
9. .			

Discuss the purpose normal values and significance of abnormal findings of the following diagnostic tests

Diagnostic Test	Purpose	Reason for change in (↑& ↓ in value)
-----------------	---------	--------------------------------------

RBC

Hgb

Hct

WBC

Neutrophils

Basophils

Eosinophils

Platelet Count

PT

PTT/APTT

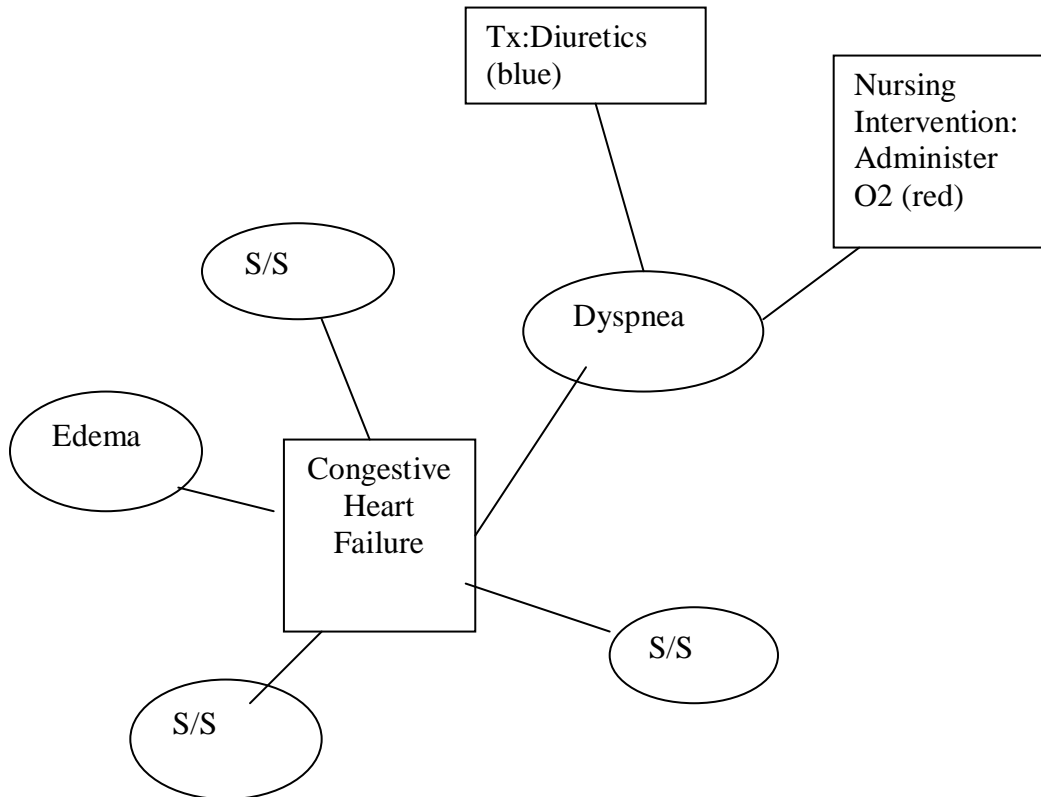
Describe the etiology, pathophysiology and signs and symptoms of Congestive Heart Failure

On the next page, develop a concept map for Congestive Heart Failure (Include both Left –Sided and Right –Sided Failure)

Include pathophysiology, signs and symptoms, nursing interventions and treatment.

Follow this format for your concept map.

- With the Diagnosis in the middle, enter all signs and symptoms and place around the diagnosis.
- Then, use **circles** for signs and symptoms (S/S) and place around the diagnosis of CHF
- Use **rectangles in blue** for treatments and make connecting lines that show relationship of treatment to signs/symptoms (S/S)
- Use **rectangles in red** for nursing interventions and make connecting lines that show relationship of nursing interventions to signs/symptoms (S/S) and/or nursing interventions to treatment. See example below:



N212

Congestive Heart Failure Case Study

Patient Profile

Mrs. E., a 70-year-old Hispanic woman, was admitted to the medical unit with complaints of increasing dyspnea on exertion.

Subjective Data

- Had a severe MI at 58 years of age
- Has experienced increasing dyspnea on exertion during the last 2 years
- Recently had a respiratory tract infection, frequent cough, and edema in legs 2 weeks ago
- Cannot walk two blocks without getting short of breath
- Has to sleep with head elevated on three pillows
- Does not always remember to take medication

Objective Data

Physical Examination

- In respiratory distress, use of accessory muscles, respiratory rate 36 breaths/min
- Heart murmur
- Moist crackles in both lungs
- Cyanotic lips and extremities
- Skin cool and diaphoretic

Diagnostic Studies

- Chest x-ray results: cardiomegaly with right and left ventricular hypertrophy; fluid in lower lung fields

Collaborative Care

- Digoxin 0.25 mg PO qd
- Furosemide (Lasix) 40 mg IV bid
- Potassium 40 mEq PO bid
- Enalapril (Vasotec) 5 mg PO qd
- 2 g sodium diet
- Oxygen 6 L/min
- Daily weights
- Daily 12-lead ECG, cardiac enzymes q8hr x 3

**Congestive Heart Failure Case Study
Critical Thinking Questions**

1. Explain the pathophysiology of Mrs. E.'s heart disease.
2. What clinical manifestations of heart failure did Mrs. E. exhibit?
3. What is the significance of the findings of the chest x-ray?
4. Explain the rationale for each of the medical orders prescribed for Mrs. E.
5. Based on the assessment data presented, write one or more appropriate nursing diagnoses.

Diabetes Mellitus Study Guide

Complete the following Pre-Class Activity prior to Endocrine Lecture

A. Review anatomy and physiology of pancreatic function

Make a **simple** diagram or concept map of the role of insulin and glucagon in the body.

B. Define the following terminology related to diabetes and discuss the cause

1. Basal insulin (no cause)
2. Hyperglycemia
3. Insulin resistance
4. Polyuria
5. Polyphagia
6. Polydipsia
7. Dawn phenomenon
8. Ketosis

C. Differentiate the pathophysiology and signs and symptoms of Type I and Type2 diabetes

1. Discuss the etiologic differences between type 1 and type 2 diabetes mellitus by
 - a. making a diagram or a graphic table of
OR
 - b. making an analogy of the differences between Type1 and Type 2 DM
OR
 - c. Role playing of the differences between Type1 and Type 2 DM

2. Compare and contrast the distinguishing features of type 1 and type 2 diabetes mellitus (DM) by completing the table below.

Features	Type 1	Type 2
Insulin status		
Treatment		
Age		
Clinical Presentation		
Former names		
Body weight		
Complications		

D. Describe the difference in onset, peak and duration of effect among different types of insulins

For each of the various types of insulin listed below, identify the brand name, onset, peak, and duration.

Insulin Classification/ Generic Name	Brand Name	Onset (Hour)	Peak (Hour)	Duration (Hour)
---	------------	-----------------	----------------	--------------------

Rapid-Acting

Insulin Aspart

Insulin Lispro

Short-Acting

Regular Insulin

Intermediate Acting

Human Insulin
Isophane

Human Insulin
Zinc

Long-Acting

Human insulin
Extended zinc

Insulin glargine

E. Describe the action, and nursing implications of oral antidiabetic agents (first generation, second generation, biguanides, alpha-glucosidase inhibitors, and thiazolidinediones).

Below, identify the five classifications of oral hypoglycemic agents, as well as specific medications and mechanism of action for each classification.

Classification	Medications	Mechanism of Action	Nursing Implications
----------------	-------------	---------------------	----------------------

F. Differentiate between hypoglycemia and hyperglycemia; diabetic ketoacidosis, and hyperosmolar nonketotic coma.

	Cause	Pathophysiology	Signs/Symptoms
Hypoglycemia			
Hyperglycemia			
DKA			
HHNS			

G. Describe the long-term (chronic) complications of diabetes and the prevention of these complications

Macrovascular

Cardiovascular

Cerebrovascular

Peripheral Vascular

Microvascular

Retinopathy

Nephropathy

Neuropathy

DIABETES MELLITUS Case Study (In-Class Activity)

History of Present Illness:

Simon Cowell

Patient #: 1234567

Simon is a 50-year old male Caucasian client who had been in good health until about two months ago when he started to feel weak and tired more rapidly than usual. On questioning, he admitted to getting up two or three times a night to urinate. He also is often thirsty at those times and drinks a glass of water each time.

His weight had been average through high school, where he had been on the football team. After leaving school, he had gradually gained weight over the years. His appetite remained excellent but he now was losing weight and becoming weak.

The pain in his feet was worse at night and sometimes kept him awake. It was burning in character and sometimes his toes felt numb. The tingling and numbness in his fingers was causing him problems at his work as an auto mechanic because he frequently drops small parts or has difficulty making fine manual adjustments to engines.

His vision was blurry at times, especially in the afternoon.

All other symptoms were negative.

Past History

Appendectomy in 1972. No chronic illnesses.

Last dental visit 6 years ago.

Family History

Both parents are deceased. His father died at age 69 from a massive stroke. His mother died at age 62 from end-stage kidney disease. She was found to have diabetes at age 48, and had a course marked by major complications including partial amputation of her right foot. She was on dialysis for three years before her death. Simon was primarily responsible for his mother's care during her later years. He administered her insulin shots twice a day and transported her to and from the dialysis center.

Simon is the youngest of four children and weighed 10 lb 2 oz at birth. Both parents were overweight, as are his siblings, two of whom have diabetes.

Social History and Habits

He is married and lives at home with his wife. He has three adult children. He works as an auto mechanic. He does not smoke. He drinks an occasional beer. He takes no medications, nutritional supplements or herbal remedies.

Physical Examination

Wt. 217 lbs., ht. 5' 11" (BMI 30), P 76, regular, BP 142/78

Obese.

Head and neck-mild bleeding of gums reported with tooth brushing.

Chest, abdomen and genital examination normal.

Feet: skin dry with calluses on the medial side of the big toes.

Nails normal.

Pulses strong and equal.

Sensation: normal to 10g monofilament.

Laboratory Tests

Day of Doctor's visit:

Urinalysis: 4+ glucose, negative for ketones and protein.

Random blood glucose: 456 mg/dL.

Total cholesterol 243 mg/dL, HDL 20 mg/dL, triglycerides 416 mg/dL.

Glycohemoglobin (HbA1c) 16.4%.

The day after Doctor's visit:

Fasting Blood Sugar: 216 mg/dL

2 hour OGTT - 407 mg/dL

Hospitalization:

Simon came in for another doctor's visit with complaints of feeling extremely weak and tired. He also presents with a swollen left leg that is very painful. Upon examination, the nurse noted heat and tenderness to the left lower extremity with 2+ pitting edema. Simon admits to having stubbed his toe three or four days ago but didn't think it was of any concern. When the physician checked his random blood sugar, it was 352 mg/dL. The physician then admitted him to the hospital in the medical surgical floor with the following admitting orders:

Admit to Med-surg floor: Diagnosis – Left leg cellulitis, DM Type 2

Diet 2000 cal ADA diet

BRP

1L NS at 75 mL/hr

Ancef 1 g IVPB every 8 hours

Accucheck AC & HS

Glyburide 5 mg PO daily

Metformin 500 mg PO BID

Sliding Scale Insulin with Regular Humulin insulin as follows:

BS	141-170	3 units
	171-210	4 units
	211-250	6 units
	251-290	8 units
	291-320	10 units
	321-350	12 units
	> or equal to 351	14 units and call MD if recheck is greater or equal to 351

****Discuss the above MD orders and rationale for each order.**

4. Discuss the acute and chronic complications of Diabetes Mellitus

Acute Complications: Differentiate Diabetic Ketoacidosis and Hyperosmolar Hyperglycemic Nonketotic Syndrome

DKA	HHNS

5. Describe the pathophysiology that leads to the long-term (**chronic**) complications of diabetes

Macrovascular

- Cardiovascular
- Cerebrovascular
- Peripheral Vascular

Microvascular

- Retinopathy
- Nephropathy
- Neuropathy

6. Diabetes management: BS control through Diet, Exercise, and Medications

- a. How often should Simon monitor his blood sugar and how often you he be seen by his physician?

- b. What is Simon's target FBS range and HgbA1C range?

- c. What modifications in diet and teaching does Simon need to achieve optimal BS levels?

Simon wrote down what he usually eats for dinner.

- 3 oz lean steak or 2 oz chicken
- 1 cup milk
- 1 cup steamed broccoli
- 1 cup winter squash
- 3 oz baked potato
- 1 bowl (2 cups) of ice cream (28 g of CHO per serving)
- 1 can regular soda (45 g of CHO per serving/can)

1. Count the total CHO in his dinner meal. _____

2. Modify Simon's meal to total 60-75 g of CHO (for dinner).

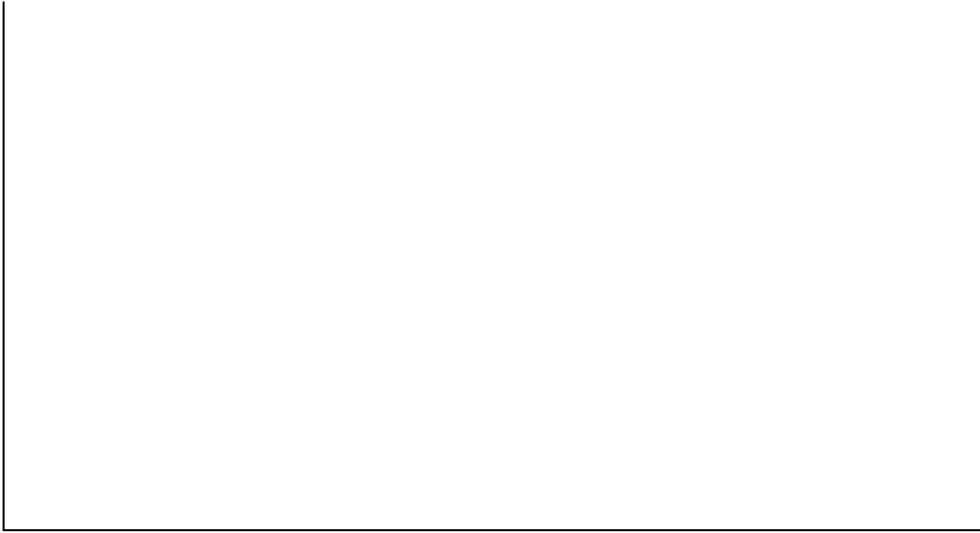
- d. Considering the symptoms Simon is experiencing, how will you proceed to teach him about exercise? What exercises are appropriate for Simon?

Graphing of Insulin Regimen (Homework: Do this at home)

7. Draw a diagram that illustrates the onset, peak and duration of action of each insulin regimen order.

Example:

A 30 year old female has type 1 diabetic. She takes the following dosage:
10 units NPH Q AM and q PM and Regular insulin sliding scale ACHS.



8. Graph the following insulin regimen to show their onset, peak, and duration.

6 units Aspart ac and 14 units glargine insulin q hs



9. Administration of Insulin

- If Simon's BS before lunch is 265, how much insulin will you administer based on the sliding scale order? _____
- If lunch tray comes at 1200, what time will you administer the insulin? _____
- What insulin reaction would you be most concerned about after administering the Regular insulin to Simon? _____
- Specify the signs and symptoms of this acute complication?

- At what time would Simon be at most risk for this adverse reaction? _____

9. The next morning, the MD changed Simon's insulin sliding scale order to Insulin lispro.

- If Simon's BS at 0700 is 208 mg/dL. How much insulin will you administer based on the sliding scale order (See sliding scale and change Regular insulin to Insulin lispro)

- If breakfast tray comes at 0800, what time will you administer the insulin? _____
- At what time would Simon be at risk for s/s/ or hypoglycemia after administration of Insulin Lispro? _____

11. What antidiabetic medication was prescribed for Simon? Discuss its action and nursing implications.

****Discuss the other oral antidiabetic medications and their actions/nursing implications.**

12. Activity: As a group, Draw the s/s of hypoglycemia & draw the s/s of hyperglycemia

Hypoglycemia	Hyperglycemia

15. Discuss the teaching needs of Type 1 and Type 2 Diabetic patients
- a. Disease process
 - b. Signs and Symptoms
 - c. Glucose Monitoring
 - d. Diet
 - e. Exercise
 - f. Drug therapy: Orals/insulin
 - g. Sick day rules
 - h. Foot care
 - i. Physician visits
 - j. Prevention of complications

Diabetes Critical Thinking Exercise (Homework: complete before next DM lecture)

Answer the following multiple choice questions and provide a rationale for your correct answer.

1. A hospitalized diabetic patient receives 10 units of regular insulin mixed with 34 units of NPH insulin at 7 a.m. The patient is away from the nursing unit for diagnostic testing at noon, when lunch trays are distributed. It is now 3 pm. The most appropriate action by the nurse is to:
 - a. save the lunch tray to be provided upon the patient's return to the unit.
 - b. call the diagnostic testing area and notify the nurse regarding how much insulin the patient received
 - c. ensure that the patient drinks a glass of milk or orange juice in the diagnostic testing area.
 - d. request that the patient be returned to the unit to eat his lunch if testing will not be completed promptly.

Rationale for answer:

2. At 6:30 pm your patient rings the call bell and complains of shaking and sweating, and asks you for a cup of orange juice. Your most appropriate action is:
 - a. Give the patient a cup of orange juice
 - b. Notify the physician
 - c. Monitor the patient's blood glucose level
 - d. Take the patients temperature and determine if she has a fever

Rationale for answer:

3. Your Type 2 DM patient tells you that she has never taken insulin at home and asks you why she is placed on insulin now. Your most appropriate response is:

3a. If your patient asks you if she will continue to be on insulin at home, you respond:

4. Your diabetic patient's FBS is 74 mg/dL. She is receiving no IV fluids and ate 75-100% of her meals yesterday. Her insulin orders reads:

Accucheck achs

NPH 4 units in am and 4 units @ hs

Regular insulin Sliding scale achs:

151-200 4 units

201-250 6 units

251-300 8 units

301-350 10 units

> 351 call MD

What assessment data do you need to have prior to taking any action?

What is your most appropriate action?

Rationale for answer:

5. Which of the following insulin regimens can be mixed into one syringe?

Mark all that apply.

- A. 8 units Lispro and 18 units NPH
- B. 10 units Regular Insulin and 20 units NPH
- C. 2 units Aspart and 15 units Lantus
- D. 4 units Novolog and 28 units Lente
- E. 10 units Humalog 75/25 and 4 units Regular insulin

6. You come on shift at 0700 and started doing your am rounds. You come to your diabetic patient's room to take her am vital signs. When you call her name, she does not respond. You shake her and speak louder and she still does not wake up. Your most appropriate initial action is:

- A. Give her orange juice and see if she wakes up
- B. Take her BS level and administer 50% dextrose IV as per agency protocol
- C. Take the crash cart and defibrillate the patient
- D. Take the patient's vital signs

Rationale for answer:

Fill in the blank.

7. 48-year old female admitted for vomiting and dehydration with a history of DM Type 1. You check your patient's FBS before breakfast and it is 369 mg/dL.

MD orders are the following:

0.45 % NS @ 80 mL/hr

Humulin NPH 34 units in am, 20 units @ hs

Accucheck achs

Regular Insulin Sliding Scale:

150-200 2 units

201-250 4 units

251-300 6 units

301-350 8 units

351-400 10 units

> 400 Call MD

a. How much insulin(and which insulin/s) will you administer? _____

b. Discuss how you would mix your insulin.

c. If breakfast is served at 8 am, what time will you have to administer her insulin?

d. What side effect will you monitor for after administration of insulin? What time will you be assessing for this s/e? _____

e. If the patient had a FBS of 138, what is your next action?

8. Identify the type of stressors each of the following diabetic patients have that will alter their BS levels.

A. 71-year-old male DM 2 patient with Pneumonia and history of COPD receiving Albuterol inhaler, Prednisone PO, 10 units of NPH SQ in am and hs.

B. 45-year old Type 1 DM patient post-appendectomy.

C. 38 –year-old male DM Type 2 patient with a fracture of the left femur.

D. 33 – year old female gestational diabetic patient in her second stage of labor.

9. You are working the night shift and caring for a 74-year old DM Type 2 female patient admitted with gangrene of the left foot. She is receiving D51/2 NS @100 mL/hr. She is scheduled for amputation of the right foot in the morning and has been NPO since midnight. Her FBS at 0600 is 152 mg/dL.

Her insulin orders include NPH 10 units in am and 10 units at hs
Regular insulin Sliding Scale

151-200	2 units
201-250	4 units
251-300	6 units
301-350	8 units
351-400	10 units and call MD if recheck is > or equal to 400

What information do you have that will help you decide what to do with this patient? What factors are involved that might alter the pt's BS?

10. Your patient has newly been diagnosed with Type 2 DM. He has an order for blood glucose monitoring achs. The physician started him on 8 units of NPH in am and 8 units of NPH in hs. He also receives a Regular insulin sliding scale as follows: Regular Insulin SQ achs Sliding Scale:

151-201	2 units
201-251	4 units
251-301	6 units
301-351	8 units
351-400	10 units and call MD if recheck is > or equal to 400

The FBS at 0600 is 161 mg/dL and has been in the range of 150-170 mg/dL for the past week since he started insulin therapy. Discuss the adjustments in insulin therapy necessary to decrease his FBS close to normal levels. (Hint: Look at peak and duration of ordered insulins).

N212: Medical Surgical Nursing 1 Course Packet

FDA Consumer magazine

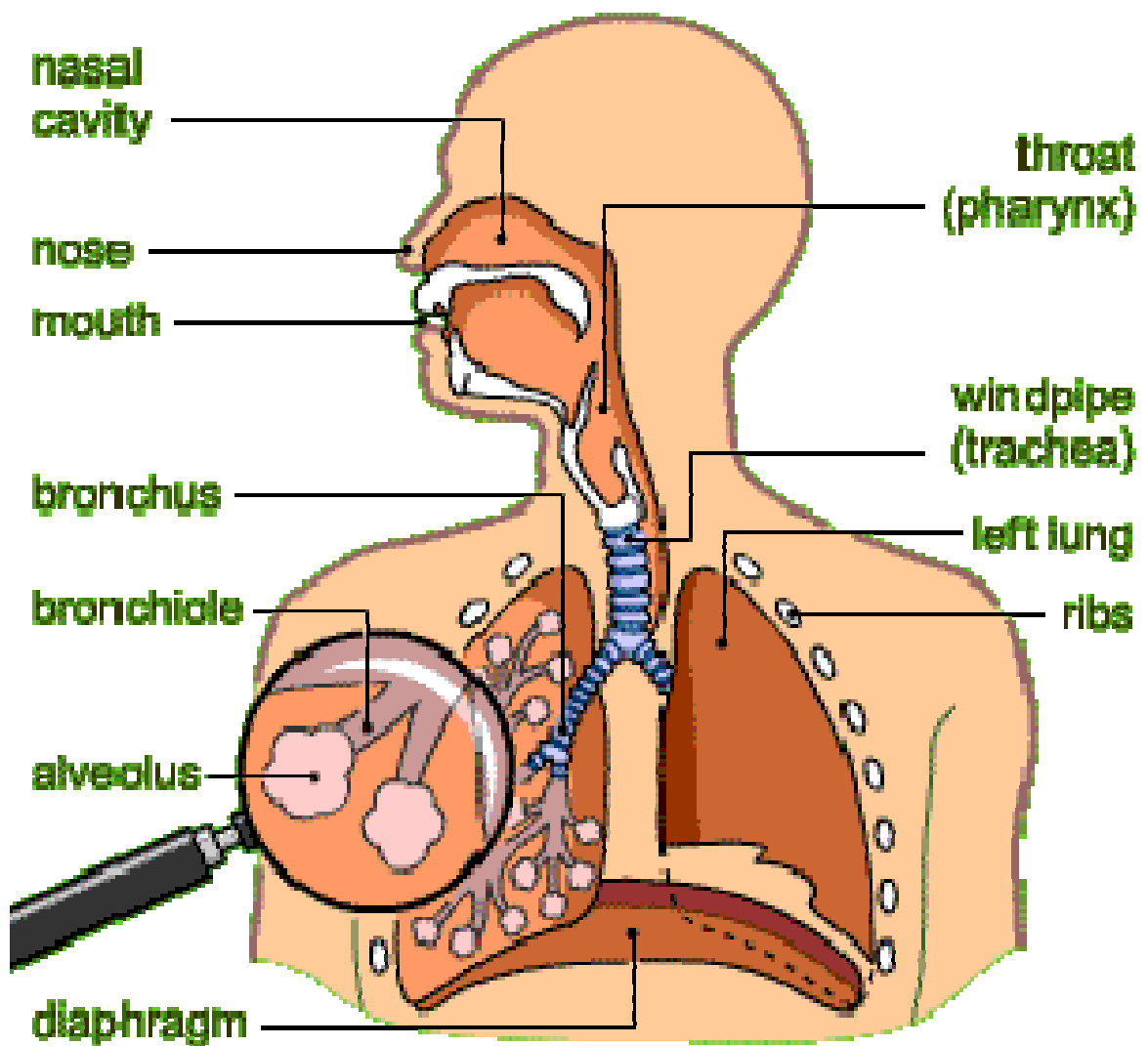
Insulin Preparations- Onset, peak, and duration of action are approximate for each insulin product, as there may be variability depending on each individual, the injection site, and the individual's exercise program.

Type of Insulin	Examples	Onset of Action	Peak of Action	Duration of Action
Rapid-acting	Humalog (lispro) Eli Lilly	15 minutes	30-90 minutes	3-5 hours
	NovoLog (aspart) Novo Nordisk	15 minutes	40-50 minutes	3-5 hours
Short-acting (Regular)	Humulin R Eli Lilly Novolin R Novo Nordisk	30-60 minutes	50-120 minutes	5-8 hours
Intermediate-acting (NPH)	Humulin N Eli Lilly Novolin N Novo Nordisk	1-3 hours	8 hours	20 hours
	Humulin L Eli Lilly Novolin L Novo Nordisk	1-2.5 hours	7-15 hours	18-24 hours
Intermediate- and short-acting mixtures	Humulin 50/50 Humulin 70/30 Humalog Mix 75/25 Humalog Mix 50/50 Eli Lilly Novolin 70/30 Novolog Mix 70/30 Novo Nordisk	The onset, peak, and duration of action of these mixtures would reflect a composite of the intermediate and short- or rapid-acting components, with one peak of action.		
Long-acting	Ultralente Eli Lilly	4-8 hours	8-12 hours	36 hours
	Lantus (glargine) Aventis	1 hour	none	24 hours

Respiratory System Study Guide

1. Review the anatomy and physiology of the respiratory system.

Identify the functions of the following structures of the respiratory system



2. Discuss the patient teaching for the following Diagnostic tests. Include the purpose of the test, pre-procedure & post-procedure Interventions including patient teaching.

TEST	PURPOSE	PRE/POST PROCEDURE INTERVENTIONS and/or TEACHING
Chest X-Ray		
Computed Tomography		
Bronchoscopy		
Thoracentesis		
Oximetry		
Pulmonary Function Tests		
Sputum Specimen and Cultures		

3. Discuss the pathophysiology, nursing assessment, interventions, and evaluation for the patient with Pneumonia

- a. On the space below, develop a simple concept map of the pathophysiology of Pneumonia

- b. Below, relate the clinical manifestations to the diagnosis of Pneumonia by identifying the pathophysiological basis of each manifestation.

Clinical Manifestation _____ Pathophysiologic Basis

Labored respirations

Use of accessory muscles

Productive cough with yellow sputum

Crackles at the bases

Lung infiltrates

Fever

Wheezing

Chest pain

Pneumonia Case Study

Patient Profile

Sam, a 27-year-old African-American male, was admitted to the hospital because of an uncontrollable fever. He was transferred from a long-term care facility. He has a history of a gunshot wound to his left chest. Following a cardiac arrest after the accident he developed hypoxic encephalopathy. He has a tracheostomy and gastrostomy tube. He has a history of methicillin-resistant *Staphylococcus aureus* (MRSA) in his sputum.

Subjective Data

- Family says that they visit him regularly and very devoted to him.

Objective Data

Physical Examination

- Thin, cachectic African American man in moderate respiratory distress
- Unresponsive to voice, touch, or painful stimuli
- Vital signs: temperature 104° F (40° C), heart rate 120, respiratory rate 30, O₂ saturation 90%
- Chest auscultation revealed crackles and scattered rhonchi in the left upper lobe

Diagnostic Studies

- White blood cell (WBC) count 18,000/ μ l (18×10^9 /L)
- Sputum specimen: thick, green colored, foul smelling; cultures pending
- Stool culture positive for *Clostridium difficile*
- Chest x-ray: infiltrate in left upper lobe; no pleural effusions noted

**Pneumonia Case Study
Critical Thinking Questions**

1. What risk factors for Pneumonia did Sam have? What is the possible cause of the Pneumonia?
2. What clinical manifestations of pneumonia did Sam exhibit? Explain their pathophysiologic bases.
3. What types of infectious disease precautions should be taken related to Sam's hospitalization?
4. What antibiotic medication is likely to be prescribed?
5. What interventions would you initiate as part of his plan of care?
6. Based on the assessment data presented, write one or more appropriate nursing diagnoses.

Musculoskeletal Study Guide

1. List the six functions of the skeletal system

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

2. What is the function of the haversian system?

3. Hematopoiesis occurs in the _____.

4. Define:

Osteoblasts:

Osteoclasts:

5. Match the following

___ Calcium & Phosphorus

___ Calcitonin

___ Vitamin D

___ Parathyroid hormone

___ Estrogen & Androgen

A. Secretion increases the calcium in the bloodstream

B. Major electrolytes in bone

C. Stimulates osteoblastic activity

D. Promotes absorption of Ca & Phos from intestines

E. Secretion decreases the calcium in the bloodstream

6. A joint is a space in which two or more bones come together

Synovial joints are lined with _____, which secretes synovial fluid for lubrication and shock absorption.

_____ are small sacs with synovial membrane that prevent friction between bone and structures adjacent to bone.

7.

What attaches muscles to bone?

What attaches bones to other bones?

What moves when you assess "deep tendon reflexes"?

8. List 6 changes that occur in the musculoskeletal system with aging

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

9. How do the following situations affect the musculoskeletal system?

Lactose intolerance:

Obesity:

Person's occupation

10. Identify risk factors for developing osteoporosis

11. Identify drug therapy and other interventions aimed to treat/prevent osteoporosis:

10. Match the following:

- ___ Standard radiography
- ___ Arthrogram
- ___ Computed tomography
- ___ Arthroscopy
- ___ Bone scan
- ___ MRI

- A. Best test for injuries or pathology that involves only bone
- B. Test is useful for identifying problems with muscles, tendons and ligaments
- C. Used to assess bone density, alignment, swelling and intactness.
- D. Fiberoptic tube is inserted into a joint for direct visualization
- E. Radionuclide test used mostly for unexplained bone pain and diffuse metastatic bone disease.
- F. X-ray of joint after contrast medium injected

Musculoskeletal Class Activities

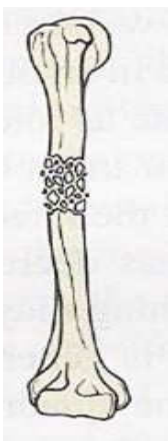
Sprains/ Strains:

R _____
I _____
C _____
E _____

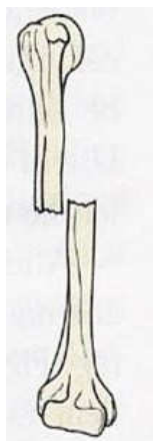
Drug therapy



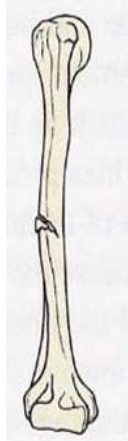
Name the Following:



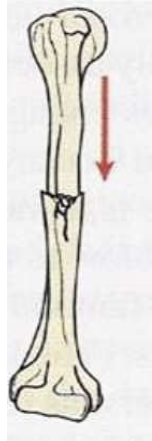
1. _____



2. _____



3. _____



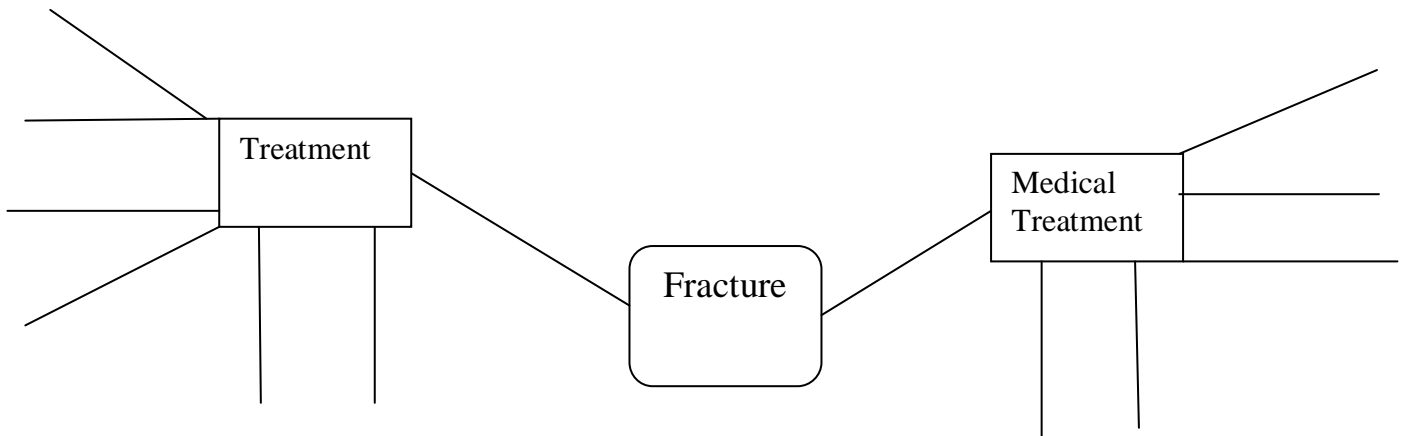
4. _____



5. _____



6. _____



Scenario #1

Jose Campo is a 55 year old male who fractured his right radial bone when he fell at work. He had an oblique fracture. Is it a closed or open fracture? What clinical manifestations do you expect to find in a patient with a fracture?

Mr. Campo is placed in a plaster long arm cast. What patient education do you need to give him regarding care of his cast? What should he do in the first 24 hours?

CAST CARE



First 24 hours	Home Care Instructions/ Signs of complications
•	•
•	•
•	•
•	•
•	•
•	•
•	•
•	•
•	•
•	•

Mr. Campo comes back in three days after the cast was placed complaining of roughness of the cast against the skin. You “petal” the cast for him. What does this mean?

Before you petal the cast, you complete a neurocirculatory assessment on Mr. Campo and notice that his hand is cool, pale and he has no feeling in two of his fingers. What do you think is happening and what should your next action be?

6 P's (*Hint this is a CSM check)

- | | |
|------|-------------------|
| 1. P | 4. P |
| 2. P | 5. P |
| 3. P | 6. Poikilothermia |

Ms. Yen has a hemi-arthroplasty done on her left hip. Post surgery does she need “hip precautions”?

1. What movements should she avoid to follow hip precautions?

She will be returning home and lives by herself. What activities do you expect her to have difficulties with at home?

2. Differentiate which picture is ORIF, hemi-arthroplasty and total hip replacement: define, purpose and post surgical nursing care.

ORIF	Hemi-arthroplasty	Total Hip Replacement

Skills Lab

TRACTION Station:

1. How do you assess the traction set up?
2. What should be included in documentation?
3. What type of traction is this? Why is it used?

HIP PRECAUTIONS:

* Find an empty bed

*Place another student in an abductor pillow. One student is the patient and one is the nurse. Practice how to get a patient out of bed while maintaining “hip precautions”.

(Remove abductor pillow before getting OOB) See SDM for guidance.

1. What is the purpose of an abductor pillow?
2. Place an abductor pillow on a fellow student.

8. Draw diagrams that represent the actions of aldosterone, ADH, and NPs to maintain fluid balance in the body.

9. Using Ch. 15 identify signs and symptoms of dehydration (fluid volume deficit) and overhydration (fluid volume overload) and nursing interventions for both.
 ***DO NOT SEPARATE into ISOTONIC, HYPOTONIC, and HYPERTONIC.
 ***Think of Dehydration overall and Overhydration overall.

10. Normal Electrolyte values
 ** Color/Highlight to differentiate the electrolytes that are more prominent in the ICF vs. ECF

	Normal range	Hypo	Hyper	Normally found ICF or ECF?
Na				
K				
Ca				
PO4				
Mg				

11. Identify key functions of each electrolyte in language you understand

Sodium	
Potassium	
Calcium	
Phosphorus	
Magnesium	
Chloride	

12. _____ follows Na

13. Identify foods that are high in sodium

14. Identify foods that are high in potassium.

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Imbalance	Causes	Signs/Symptoms	Medical Treatment	Nursing considerations
Hyponatremia				
Hypernatremia				
Hypokalemia				
Hyperkalemia				

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Hypophosphatemia				
Hyperphosphatemia				
Hypomagnesemia				
Hypermagnesia				

**Keep it simple. Think about the concepts (systems affected) instead of individual pieces of information

Gastrointestinal Study Guide

1. What organs/ glands are included in the gastrointestinal system?
2. Draw a picture that represents the four tissue layers of the gastric lumen.
3. What are the four functions of the GI system?
 - 1.
 - 2.
 - 3.
 - 4.
4. During digestion, the stomach secretes _____, the liver secretes _____ and digestive enzymes are released.
5. What is the purpose of the upper esophageal sphincter and the pyloric sphincter? Where are they located?
6. Parietal cells secrete _____. Parietal cells also produce _____, which is important in the absorption of Vitamin B12. Chief cells secrete _____, which is a precursor to pepsin.
7. The stomach secretes _____ and _____ to protect the stomach from mechanical and chemical damage.
8. What is the primary location for absorption in the GI tract?
9. The small intestine is _____ feet long and the large intestine is _____ feet in length.
10. It takes _____ hours for contents to be propelled through the small intestine.

11. List the body structures that are located in each quadrant:

Right Upper Quadrant

Left Upper Quadrant

Right Lower Quadrant

Left Lower Quadrant

12. Define the following:

Anorexia:

Dyspepsia:

Rebound tenderness

Perioperative Care Study Guide

1. When eliciting preoperative information from a patient, what is the concern with the following substances?

Tobacco:

Alcohol and illicit substance abuse

Herbs
2. What are some options for blood donations and bloodless surgery?
3. What is the purpose of performing a physical assessment and obtaining VS before surgery?
4. What types of laboratory and diagnostic testing may be done before surgery?
5. What type of information do you hope to obtain through a preoperative psychological assessment?
6. What is the nurses' role in informed consent and consent forms?
7. What type of preoperative preparation is done for patients in regards to diet, medications, intestinal and skin preparation?
8. Patients are often taught before surgery, actions we wish them to perform after surgery. Describe the patient teaching that should be done BEFORE surgery.

9. Describe what the patient should have on when going to the OR and what the patient should not have on.

10. Briefly define the key characteristics of each type of anesthesia.

general anesthesia

local or regional anesthesia

conscious sedation

11. What should be included in the initial assessment when a patient returns to the medical-surgical unit from the post-anesthesia unit?

12. Identify Post-operative complications for each system and nursing interventions to prevent the complications identified.

System	Complications	Nursing Interventions
Respiratory	Airway obstruction Hypoxemia Atelectasis Pneumonia	
Cardiovascular	Hypotension Hypertension Arrhythmias Deep vein thrombosis	
Neurological	Pain Altered mental status	
Fluid & Electrolyte	Hypovolemia Electrolyte abnormalities	
Gastrointestinal	Nausea/vomiting abdominal distension paralytic ileus	
Skin	Dehiscence/Evisceration Bleeding Surgical drain Postoperative infection	
Urinary	Low urinary output Urinary retention	
Temperature alterations	Hypothermia Low grade temperature Fever +/- shaking chills	

COMMON SURGICAL PROCEDURES

GENERAL SURGERY

1. Appendectomy
2. Laparoscopy
3. Laparotomy
4. Cholecystectomy with intraoperative cholangiogram and possible common duct exploration
5. Bowel Resection or Colectomy
6. Colostomy
7. Gastrostomy
8. Hemorrhoidectomy
9. Herniorrhaphy (femoral, inguinal, umbilical)
10. Pilonidal Cystectomy
11. Breast Biopsy with or without needle localization
12. Mastectomy with or without axillary dissection
13. Abdominal perineal resection

OB/GYNE

1. Abdominal Hysterectomy
2. Abdominal Hysterectomy with bilateral Salpingo-oophorectomy (TAHBSO)
3. Vaginal Hysterectomy
4. Bilateral Tubal Ligation
5. Anterior Posterior Cystocele repair (AP repair)
6. Caesarean Section (C-Section)
7. Dilation and Curettage (D.& C.)
8. Hysteroscopy
9. Hysto-salpingogram

THORACIC/CARDIC

1. Thoracotomy
2. Thoracoscopy
3. Pneumonectomy
4. Carotid Endarterectomy
5. Resection of Abdominal Aortic Aneurysm (AAA)
6. Femoral Embolectomy
7. Femoral Popliteal Bypass
8. Femoro-Femoral bypass
9. Coronary Artery Bypass (CAB)
10. Multiple Coronary Artery Bypass (MCAB)

UROLOGY

1. Cystostomy (cysto)
2. Prostatectomy
3. Transurethral resection of the Prostate (TURP)
4. Hydrocelectomy

ORTHOPEDIC

1. Above the Knee Amputation (AKA)
2. Below the Knee Amputation (BKA)
3. Open Reduction and Internal Fixation (ORIF) Bone specific
4. Total Knee Arthroplasty (TKA)
5. Total Hip Arthroplasty
6. Hemi Arthroplasty
7. Arthroscopy (V.A.)
8. Arthroscopy with anterior Cruciate Ligament Resection (V.A. and A.C.L.with allograft or autograph)
9. Bunionectomy
10. Carpal Tunnel Release
11. Lumbar Laminectomy with or without fusion and/or instrumentation

EAR NOSE & THROAT

1. Tonsillectomy
2. Tonsillectomy and Adenoidectomy (T & A)
3. Myringotomy with tube Placement
4. Laryngoscopy
5. Bronchoscopy
6. Sub mucous Resection (SMR)
7. Thyroidectomy

EYE

1. Cataract Extraction With Intra Ocular Lens (Cataract Extraction with IOL)
2. Removal of Chalazion
3. Repair Retinal Detachment

NEURO

1. Craniotomy
2. Craniotomy with Burr Holes
3. V-P shunt insertion

PLASTIC

1. Abdominalplasty
2. Breast Augmentation
3. Mammoplasty
4. Blephroplasty
5. Rhinoplasty
6. Rhydectomy

Pain Management Study Guide

1. What is Margo McCaffery's definition of pain? (personal perspective)
2. List the sympathetic nervous system response to acute pain.
3. Compare and contrast characteristics of acute and chronic pain

Acute Pain	Chronic Pain

4. Define the following words

Nociceptors

Neurotransmitters

Nociceptive pain

Visceral pain

Neuropathic pain

Tolerance

Physical dependence

Withdrawal symptoms

Addiction

Pseudoaddiction

Placebo

5. What does pain “the fifth vital sign” mean?
6. List common drugs for each category and highlight ones that you have heard of before.

Non-opioids	Opioids	Adjuvants

7. What is a “ceiling affect” found in non-opioid analgesics?
8. What is an equianalgesic chart and how does the nurse use it?
9. What will happen if an agonist-antagonist is given after a patient has been receiving opioids? Describe the symptoms the patient may exhibit.
10. List side effects of (Mu) opioids. Highlight the one not limited by time.
11. What is the antagonist agent used for opioid overdose?
12. Which route of administration provides the fast onset of action?
13. What is a patient controlled analgesia (PCA) and why does it usually provide greater pain control?
14. What is an adjuvant analgesic?
14. List alternative means (non pharmacological) of providing pain relief.

Neurological Disorders Study Guide

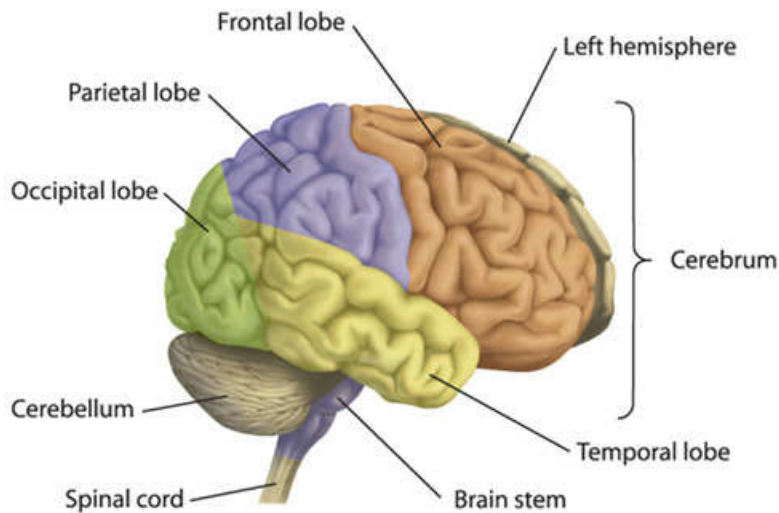
1. Fill in the blanks:

Major Divisions of the Nervous System

The nerves of the body are organized into two major systems:

- the **central nervous system** (CNS), consisting of the _____ and _____,
- the **peripheral nervous system** (PNS), the vast network of _____ and _____ nerves linking the body to the brain and spinal cord. The PNS is subdivided into:
 1. the _____ nervous system (**involuntary control** of internal organs, **blood vessels, smooth and cardiac muscles**), consisting of the _____ and _____
 2. the _____ nervous system (**voluntary control** of skin, **bones, joints, and skeletal muscle**).

2. Identify the functions of following brain structures



3. Identify components of a complete neurological assessment and a rapid neurological assessment

Complete Neurological Assessment	Rapid Neurological Assessment

4. Define and discuss the types of stroke and related risk factors.

Type of Stroke	Define	Identify related risk factor
<u>Ischemic</u> Thrombotic Embolic		
<u>Hemorrhagic</u>		

5. Make a concept map on Right sided Stroke and Left sided stroke and include the pathophysiology, signs and symptoms, nursing interventions, and treatments on a separate sheet of paper

6. Make a concept map on seizures and include pathophysiology, signs and symptoms, nursing interventions, and treatments on a separate sheet of paper

Cerritos College Student _____
____ Fall ____ Spring ____ Year

Health Occupations Division
Associate Degree Nursing Program
Clinical Performance Evaluation
Nursing 212

This evaluation tool will be used for measurement of the clinical course objectives. Evaluation of the clinical performance will be based on behaviors identified in the evaluation key and the accompanying guidelines. Professional nursing requires competency in both theoretical knowledge and application to clinical practice. Competency must be demonstrated by meeting all Critical Clinical Competencies to pass the clinical component of this nursing course.

Three or more needs improvement “NI” in one major area will result in an “overall needs improvement” for that major area and an advisement note. A student may progress with this rating in one of the major areas.

A student who receives more than one “overall needs improvement” in a major area will fail clinically. A student who has a single needs improvement in five or more major areas throughout the tool will fail clinically.

**MASTERY MUST BE DEMONSTRATED IN ALL OF THE FOLLOWING
CRITICAL CLINICAL COMPETENCIES**

- ❖ **Demonstrates safe practice of designated nursing skills.**
- ❖ **Provides for physical safety of patient.**
- ❖ **Protects patients from emotional harm.**
- ❖ **Communicates clearly both verbally and in writing**
- ❖ **Seeks assistance from instructor or other healthcare members for care which is beyond the student’s level of knowledge or experience.**
- ❖ **Calls attentions to own errors and reports situations accurately.**
- ❖ **Maintains confidentiality.**
- ❖ **Complies with college and agency policies and procedures.**
- ❖ **Submits required graded papers.**
- ❖ **Passes Medication Calculation Exam**

Other behaviors that will result in clinical failure include:

- **Dishonesty** including but not limited to cheating, plagiarism, fabrication, and misrepresentation.
- **Violent or aggressive behavior**
- **Disrespectful and/or abusive language or behavior**
- **Use of drugs or alcohol (legal or otherwise) in clinical setting**
- **Stealing**
- **Conviction of felony**

Nursing 212 Clinical Evaluation Tool

0	OUTSTANDING: Consistent above-average performance, self-directed. Requires minimum guidance
S	SATISFACTORY: Overall satisfactory, occasionally requires some guidance
NI	NEEDS IMPROVEMENT: Inconsistent performance requires repeated guidance and supervision.
U	UNSATISFACTORY: Unsatisfactory performance. Results in clinical failure.

Core Clinical Competencies	Midterm				Final			
	O	S	NI	U	O	S	NI	U
PROFESSIONAL BEHAVIORS								
Practices safe professional behaviors consistent with ethical, legal and regulatory standards of professional nursing practice when providing client care.								
1. Complies with college, nursing department, and facility regulations and policies.								
2. Arrives at clinical on time and prepared. Submits all assignments within designated time frame, including referrals and make-up assignments.								
3. Notifies instructor when unable to attend clinical or will be late.								
4. Demonstrates responsibility and accountability for one's actions. a. Calls attention to errors and reports situations to clinical instructor. b. Reports unsafe practices. c. Maintains professional boundaries in the nurse-client relationship.								
5. Practices within guidelines of N212; individual knowledge and expertise; and seeks assistance for care beyond level of knowledge.								
6. Abides by HIPPA standards								
7. Follows universal precautions.								
8. Demonstrates professional behavior such as attitude, punctuality, behavior and appearance (follows dress code).								
COMMUNICATION	O	S	NI	U	O	S	NI	U
Communicates effectively with nursing staff, various members of the healthcare team, patients and family members.								
1. Communicates verbally in a clear and concise manner in English.								
2. Writes in a clear and concise manner in English.								
3. Utilizes therapeutic communication when interacting								

with patients, family and significant others.								
4. Documents and communicates patient assessment, interventions and evaluation of care verbally and in writing using appropriate medical terminology.								
5. Communicates effectively with the healthcare team, providing patient updates in a timely manner to staff nurse and instructor.								
CRITICAL THINKING AND CLINICAL DECISION MAKING	O	S	NI	U	O	S	NI	U
Uses critical thinking when performing all steps of the nursing process with patients in the clinical setting.								
1. Makes clinical judgment decisions to ensure accurate and safe care.								
2. Prioritizes care based on actual clinical situation(s) encountered.								
3. Demonstrates verbal and written ability to apply theory to clinical situations and state scientific rationale.								
4. Demonstrates application of prior and current learning.								
5. Demonstrates appropriate problem solving.								
NURSING PROCESS	O	S	NI	U	O	S	NI	U
Applies the Nursing Process in implementing patient care.								
1. Utilizes appropriate sources to elicit data about the patient.								
2. Collects and organizes data in all 4 modes of the Roy Adaptation Model recognizing the biopsychosocial nature of the patient.								
3. Demonstrates ability to accurately perform and document physical assessment.								
4. Performs an environmental assessment.								
5. Identifies appropriate nursing problems.								
6. Formulates patient-specific nursing diagnoses using NANDA.								
7. Develops patient-specific outcomes.								
8. Develops patient-specific interventions.								
9. Correctly evaluates patient response to care and revises patient care as needed.								
10. Revises care as indicated following evaluation of outcomes.								
11. Organizes plan of care and prioritizes total patient care for 1 to 2 patients.								
12. Completes the Nursing Care Plan/Concept Map with a 75% or higher.								
CARING INTERVENTIONS	O	S	NI	U	O	S	NI	U
Demonstrates caring behaviors towards the patient,								

significant others, peers and members of the healthcare team.								
1. Assists the patient to obtain optimum comfort and functioning.								
2. Provides a safe physical and psychological environment protecting the patient from undue harm, maintaining dignity and respect.								
3. Identifies and honors the emotional, cultural, and spiritual influences on the patient's health.								
4. Adapts care considering the patient's values, customs, culture and/or habits when possible.								
5. Advocates for the patient.								
6. Demonstrates empathy when providing nursing care.								
TEACHING AND LEARNING	O	S	NI	U	O	S	NI	U
Demonstrates application of teaching-learning principles.								
1. Provides simple explanations and instruction to patients.								
2. Instructs the patient prior to interventions and procedures.								
3. Identifies patient's knowledge level and readiness to learn.								
4. Modifies teaching according to patient needs.								
5. Documents and reports patient's response to instruction.								
CLINICAL SKILLS	O	S	NI	U	O	S	NI	U
Competently performs technical skills with patients in the health care setting.								
1. Administers medications safely according to N212 guidelines and program policies.								
2. Passes Medication Calculation Exam with 80% or greater.								
3. Demonstrates safe practice of designated nursing skills for N212 in clinical and/or skills lab.								
4. Seeks out patients that provide varied learning and skills opportunities.								
MANAGING CARE AND COLLABORATION	O	S	NI	U	O	S	NI	U
Effectively manages patient care in collaboration with other members of the healthcare team.								
1. Works cooperatively with health care team members, peers, and faculty toward common patient-centered outcomes.								
2. Functions in the role of team coordinator/ leader as identified in the course guidelines. (N/A at this level)								
3. Manages the patient assignment in an organized and efficient manner completing care within allotted time frame.								
4. Demonstrates leadership qualities (positive attitude, assertiveness, initiative and self-direction).								

N212 Nursing Skills Competency

Check box for each skill. S= Satisfactory, NI= Needs Improvement, U=Unsatisfactory LP= lab Performance only, LO= Lack of opportunity to evaluate

	S	NI	U	LP	LO
Performs skills necessary to meet nutritional needs including:					
Feeding patients via nasogastric and/or gastrostomy tubes (H2O flush /placement check)					
Inserting nasogastric tube					
Performs skills necessary to meet elimination needs including:					
Inserting and maintaining catheters					
Assessing and recording fluid output					
Administering an enema, Harris flush, rectal tube or suppository					
Draining a Foley catheter bag					
Collecting specimens					
Performs skills necessary to meet oxygenation needs including:					
Administering and monitoring oxygen therapy					
Performing oropharyngeal suctioning					
Performs skills necessary to meet protection needs including:					
Medical Asepsis					
Applying isolation techniques					
Maintaining a sterile field					
Providing wound care					
Care of drains (JP, hemovac, penrose, NGT to suction)					
Performs skills necessary for medication administration and monitoring					
Oral medication administration					
SQ, IM or ID medication administration					
Blood sugar monitoring					
Assessment of IV infusions and sites (IVF, rate, and site)					
Discontinuing IV					
Pass medication administration skill testing within 2 tries. Failure to pass within 2 tries will result in an advisement note.					

N212 Overall Clinical Competency

O	OUTSTANDING: Meets all Critical Clinical Competencies. Consistent above-average performance, self-directed. Requires minimum guidance
S	SATISFACTORY: Meets all Critical Clinical Competencies. Overall satisfactory, occasionally requires some guidance
NI	NEEDS IMPROVEMENT: Meets all Critical Clinical Competencies. Inconsistent performance requires repeated guidance and supervision. Three or more needs improvement “NI” in one major area will result in an “overall needs improvement” for that major area and an advisement note. A student may progress with this rating in one of the major areas.
U	UNSATISFACTORY: Unsatisfactory performance. 1) Fails to meet one or more critical clinical competency or 2) Receives more than one “overall needs improvement” in a major area or 3) Receives a single “needs improvement” in five or more major areas throughout the tool. Results in clinical failure.

Midterm Evaluation

Outstanding Satisfactory Needs Improvement Unsatisfactory

Comments:

Final Evaluation

Outstanding Satisfactory Needs Improvement Unsatisfactory

Comments:

Instructor Signature: _____ Date: _____
 Student Signature: _____ Date: _____

Instructor Signature: _____ Date: _____
 Student Signature: _____ Date: _____

Cerritos College
Health Occupations
Department of Nursing
Guidelines for Clinical Performance Evaluation Tool

Professional Behavior

Students will practice safe professional behaviors consistent with ethical, legal and regulatory standards of professional nursing practice when providing client care.

- Students are held accountable to standards of practice for nursing care. Policies and procedures should be used to guide practice and be upheld.
- Students must notify instructor of any clinical absence or tardiness. Failure to do so will result in a clinical failure.
- **Tardiness is not an accepted clinical behavior. The first tardy will result in a verbal warning, the second will result in an advisement note and the third tardy will result in a clinical failure.**
- **Two or more absences may result in a clinical failure.**
- All clinical hours will be made up according to individual course policy.
- Students are to arrive at the clinical site in a timely manner with written assignments completed and equipped with the knowledge necessary to give safe competent care. Failure to do so will result in adjustment of the patient care assignment, up to and including being sent home.
- Students are expected to demonstrate consistency in growth in both written assignments and clinical performance.
- The ability to follow directions and guidelines is imperative in the practice of professional nursing. Students are expected to adhere to all directions and guidelines, both in the care of the patient and in preparation of written assignments. It is the responsibility of the student to seek clarification, if unclear about expectations. Assessment of the ability to follow guidelines and directives extends to the policies and procedures of the clinical facility to which the student is assigned.
- Practices within guidelines of N212 and individual knowledge and expertise and seeks assistance for care beyond level of knowledge. Clinical instructors recognize that students are learning. Students are to acknowledge the limitations of their knowledge and seek to correct areas of knowledge deficit. Assistance should be sought as needed; failure to do so may jeopardize the patient, the student or others.
- Students are expected to verify dependent nursing interventions in the physician's orders prior to implementation. This includes all treatments and medications. In addition the student is responsible to check the physicians' orders regularly to determine if existing orders have been altered or new orders have been written.
- Students represent not only themselves and their families, but Cerritos College, the clinical facility to which they are assigned and the profession of nursing as a whole. Physicians, patients, families and other health care team members judge nursing care by the behavior and appearance of the nurse. The expectation is that students will role model the highest standards of professionalism, including adherence to the Student Dress Code policy. A professional demeanor is to be maintained at all times.

- A component of action and behavior on the part of the professional is the ability to be self-directed, and example of which is to use clinical time wisely by seeking learning experiences. Students are expected to participate in shared learning experiences, including group conferences. Development of awareness and understanding of how personal/professional behavior influences patient care is expected of each student.
- Students are to demonstrate knowledge of and competency in infection control measures appropriate to the clinical site and the needs of each patient. These include but are not limited to: hand hygiene, wiping down equipment, and proper use of personal protective equipment.
- Students are expected to maintain the confidentiality of all personal health information in accordance with HIPPA. Identifying data must be removed from all documents leaving the clinical site.

Communication

Students will communicate effectively with nursing staff, various members of the healthcare team, patients and family members.

- Students are expected to communicate clearly in English at all times and use appropriate medical terminology. Bilingual students may communicate with their patients in the patient's preferred language.
- The student should be able to communicate a clear and concise verbal report of their patients. Students are expected to communicate with their patients while providing care.
- Written assignments should be legible and grammatically correct.
- Students are expected to show improvement in their documentation and verbal skills as they progress in clinical.
- Ability to communicate following proper lines of authority will be included in the evaluation. Students are expected to clarify their role responsibilities with the RN and CNA prior to assuming care.
- Verbal Report
 - First Semester Students
Students should begin to formulate a verbal report that includes patient condition, pertinent assessment findings and priority care needs.
 - Second semester students
Students are expected to provide an organized verbal and written report.
 - Second Year Level Students
Students are expected to provide an organized verbal report reflecting patient condition, pertinent assessment findings and priority care needs.

Critical Thinking and Clinical Decision Making

Student will use critical thinking when performing all steps of the nursing process with patients in the clinical setting.

- Nursing Process Worksheets (NPWs) are to be completed on all patients prior to clinical. Arriving to clinical unprepared will result in adjustment of the patient care assignment, up to and including being sent home. Being sent home warrants an advisement note and the student is required to complete a clinical make-up assignment. .

- Students are expected to show progression in critical thinking and problem solving skills.
- Students are expected to function within the scope of practice within their respective course.
- Unsafe clinical behaviors/judgment will result in a clinical failure.
- Students are expected to transfer and apply knowledge from previous and current courses.
- Students must show progression in the application of scientific rationale.
- Students are expected to show a progression in the ability to synthesis data and develop an understanding of the patient's clinical situation. Students should show a progression in being able to recognize the relationship between assessment data (physical assessment findings, diagnostic tests, and medications).
- Problem Solving
First Year Level
Students will begin to apply problem solving with support from the clinical instructor. Students should present problem issues to the clinical instructor armed with possible solutions to the problem at hand that demonstrate critical thinking.
Second Year Level
Students will apply problem solving while providing care for more complex and increased number of patients with increased confidence. Students should begin to anticipate possible outcomes prior to deciding nursing actions. They will validate decisions with the instructor and require less direction and dependency throughout the clinical rotation. Their level of independence remains within the student role but allows for a safe and smooth transition to the next course.

NURSING PROCESS

Student will apply the Nursing Process in implementing patient care.

- Students will utilize the nursing process when assessing, implementing and evaluating care.
- The Roy Adaptation Model will be used to collect and organize assessment data.
- Assessment data should include subjective and objective data. Objective data may include but not limited to diagnostic tests, lab values, past medical history, physical assessment, medications, physician orders and interdisciplinary treatments.
- Students are expected to use NANDA approved nursing diagnoses provided in the course packet.
- The ability to formulate a nursing care plan that reflects the priority nursing problems for a patient is critical to the function of a nurse. Failure to achieve 75% on the Nursing Care Plan/Concept Map will result in an advisement note. Failure of a Nursing Care Plan/Concept Map in a subsequent course will result in a clinical failure in that course.
- Students are encouraged to seek instructor assistance and/or guidance prior to submission of the Nursing Care Plan/Concept Map.

Caring Interventions

Student will demonstrate caring behaviors towards the patient, significant others, peers and members of the healthcare team. Students are expected to:

- Protect and promote the patient dignity.
- Identify psychosocial needs.
- Provide for the privacy of patients at all times.
- Protect the patient from physical harm by identifying potential or actual threats and act to correct them. Examples of unacceptable behaviors include: leaving side-rails down when patient is at risk for falling, leaving syringes with needles in the room, not recognizing breaks in sterile technique, picking up items off the floor and using in patient care, not discriminating clean versus unclean, not using gloves when needed when protecting self or others, not utilizing hand hygiene, not recognizing when contamination occurs and taking appropriate corrective actions or not adhering to isolation policies.
- Protect the patient from emotional harm by identifying potential or actual threats and act to correct them. Examples of unacceptable behaviors include: ignoring patient concerns; failure to psychologically prepare patients before procedures; making statements that instill fear or anxiety; using inappropriate “slang” language or inappropriate terms of endearment such as “honey” or “sweetie”; sexual innuendos; not promoting an environment that allows the patient to express their feelings; not demonstrating empathy while caring for patients and performing procedures; not seeking guidance if unsure of course of action; failure to report abnormal findings or change in condition.

Teaching and Learning

Students will demonstrate application of teaching-learning principles. Students are expected to:

- Document patient teaching on NPW and patient record as indicated.
- Include teaching in the care of their patients and families from the first clinical course and throughout the program.
- Demonstrate the ability to prepare and present educational needs of the patient as well as evaluate the effectiveness of the teaching.
- Utilize patient teaching opportunities with medication administration.
- Assess the patient’s understanding of clinical situation or disease process.
- Assess patient’s management of chronic conditions.
- Respond to patient questions appropriate to their level.

Managing Care/Collaboration

Students will effectively manage patient care in collaboration with other members of the healthcare team.

- Students are expected to interact in a professional and collegial manner with all members of the healthcare team.
- The student team coordinator obtains pertinent data from team members on all patients assigned to the team. **(N/A at N212 level)**
- The team coordinator gives a complete report to the clinical instructor on the status of patients assigned to the team. **(N/A at N212 level)**

N212: Medical Surgical Nursing 1 Course Packet

- All students are to utilize appropriate channels of communication (assigned staff nurse, student team coordinator, and instructor) when providing patient care.
- Students are expected to report to appropriate staff and instructor pertinent abnormal patient information or when patient situations change. Examples: abnormal VS, respiratory distress, unrelieved pain, low urine output, abnormal labs, signs of bleeding, changes in level of consciousness and inappropriate behavior.
- Students are to assist fellow students and staff as needed. Students are expected to answer all patient call lights and requests for assistance even if the student is not assigned to the patient. Students should relay requests to appropriate staff nurse.
- Students will delegate aspects of nursing care to the appropriate members of the student team according to Team Role Guidelines. **(N/A in N212)**
- Students are expected to begin developing leadership and assertiveness skills and show initiative in solving problems and meeting patient needs. Examples: Following up on missing food trays, medications, checking orders, providing education, asking MD questions, volunteering to assist MDs, seeking out learning opportunities, and developing communication skills.

III. Discuss those areas that you identify as needing to be improved or needing development over a period time.

IV. Indicate by placing a check mark in the space provided those skills performed in this clinical rotation. If performed more than once indicate the number of times in the space. If skill is not listed, write it in at the bottom of the page and indicate the number of times performed.

Medication administration

- IM injection
- Subq
- GT/NGT medication
- Eye drops
- Transdermal medication
- enemas
- suppositories

- Blood sugar monitoring
- Calculating IV drip rate
- Monitoring IV drip rate
- Discontinuing IV
- GT feeding continuous
- GT bolus feeding
- GT H2O flush
- Foley insertion
- Discontinuing foley
- Oxygen administration
- Suture/Staple removal

Suctioning

- Oral
- Pharyngeal

- Sterile dressing change
- Clean dressing change
- Wound packing
- NGT insertion
- NGT feeding continuous
- NGT bolus feeding
- NGT placement check/flush
- Discontinuing NGT
- Isolation precautions
- Pulse oximetry

212 NURSING CARE PLAN Guidelines

The Nursing Process worksheet (NPW), assessment guide and concept map may be handwritten in ink. **All sections must be legible. Any document that cannot be read will receive a grade of zero.** All other sections of the Nursing Care Plan must be **typed**. Typed sections include the History of Present Illness, Rationale, and Discharge Plan/ Patient Teaching. Previously submitted documents should be rewritten with improvements based on instructor feedback.

Nursing care plan should be placed in the order listed below. Be sure to follow directions and have someone check for spelling errors and grammar prior to final submission to instructor.

According to Cerritos College Nursing Department policy, a paper is considered late if it is received more than 10 minutes after the designated time and date. A late paper will be graded and a 10% reduction in grade earned is made. If a paper is received between 24 and 48 hours after the due date/time, a 20% grade reduction is applied. Papers received more than 48 hours late may be read by instructors for feedback to the student but are not assigned a grade. A student will fail the course if a paper is not submitted.

A. HISTORY OF PRESENT ILLNESS

1. On a separate sheet of paper, submit a typed narrative of events leading up to admission which includes:
 - a. A discussion of health history, including significant illnesses, surgeries and injuries which may affect present illness (diabetes, vascular disease, amputation, etc.)
 - b. A description of what brought the patient to the health care provider.
 - c. A summary of events (course since onset) up to days of student /patient interaction.

B. DIAGNOSTIC DATA LIST

Submit NPW, neatly rewritten and corrected following NPW guidelines. Include most current labs, x-rays and other diagnostic tests pertinent to current and chronic medical conditions.

C. MEDICATION LIST

Submit NPW, neatly rewritten and corrected according to NPW guidelines.

D. ASSESSMENT GUIDE

1. Submit assessment guide, neatly rewritten and corrected according to NPW guidelines.
2. Collect and list all pertinent assessment data as it relates to the Physiologic and Psychosocial Modes of the Roy Adaptation Model.
3. The assessment is based on day/days that the student cared for the patient.
4. Assessment is to be comprehensive including subjective and objective behaviors.
5. All abnormal/ineffective behaviors/data must be bolded or highlighted with a colored marker.

E. CONCEPT MAP

1. Start with a box in the center. Enter the reason the patient is seeking health care (medical or surgical diagnosis).

2. Working out from the center, create a box for every major problem (key concepts) you have identified. Three to four problems should be identified. One problem should be psychosocial.
3. Support every major problem with clinical patient data to include physical assessment findings (subjective and objective), treatments, medications, abnormal diagnostic data, and medical history.
4. Include nursing interventions for each problem identified.
5. Identify the key assessments that should be done for this patient and list in the center box under key assessments.
6. If there is data that doesn't fit and you don't know where to place it, create a separate box off to the side of the diagram.
7. Draw lines between the boxes to show relationships between related problems
8. Number each box to prioritize problems
9. Label each problem with a nursing diagnosis

F. RATIONALE

On a separate page discuss the following topics. Arrange in separate paragraphs or sections.

1. Rationale for choosing the problems identified
2. Rationale for order of prioritization
3. Identify the relationships that exist between the nursing diagnoses.
Ex: Relationship between pain and altered mobility. If a patient has pain in his left lower extremity it alters the patient's ability to move/ambulate.
Ex: Anxiety and self care. High anxiety alters the patient's ability to participate in care.
4. Rationale for each nursing intervention listed.

G. OUTCOMES/ EVALUATION

1. On a separate page identify one measurable patient centered outcome for each nursing diagnosis.
2. Write an evaluation of each outcome identified. State specific evidence or indicators that show whether the goal is met or unmet. This evidence must be stated in patient behaviors (subjective or objective). Stating "unable to evaluate because. . ." is not acceptable. Restating the outcome is not acceptable. If you were not able to actually evaluate the outcome in clinical, then making up the data is acceptable.

H. DISCHARGE PLAN/ PATIENT TEACHING

On a separate page, in narrative form write a discharge plan for your client that includes the following information. Anticipate your patient's needs and address all of the following components.

1. Placement/type of dwelling: Home, ECF/SNF, Board and Care etc.
2. Support systems (family, relatives, friends, church members, etc.)
3. If assistance needed: who and with what activity
4. Equipment needs and outside resources/referrals
5. Patient teaching
Discuss specific teaching that should be given to the patient.
Ex: medications, when to seek medication attention, medical follow up, information related to diagnosis.

Nursing Care Plan Grading Rubric: N212 Medical Surgical Nursing 1

	Total Points	90-100% Exemplary	75-89% Satisfactory	<75% Unsatisfactory	0 % Omitted	Total
		Includes all of the content areas with an accurate and in depth understanding of the problem area.	Includes most of the content area. May be missing some pertinent information. Demonstrates understanding of problem area	Fails to include pertinent information or demonstrate understanding of problem area.	Information is not included or addressed.	
History of Present Illness	5	5	3-4	1-2	0	
Nursing Process Worksheet	16	14-16	12-13	1-11	0	
Diagnostic Data	(3)	3	2	1	0	
Medication List	(3)	3	2	1	0	
Assessment Guide	(10)	9-10	7-8	1-6	0	
Concept Map	43	40-43	33-39	1-32	0	
Nursing diagnoses	(5)	5	3-4	1-2	0	
Assessment data	(14)	13-14	11-12	1-10	0	
Interventions	(14)	13-14	11-12	1-10	0	
Prioritizations	(5)	5	3-4	1-2	0	
Relationships	(5)	5	3-4	1-2	0	
Rationale	16	14-16	12-13	1-11	0	
Problems chosen	(4)	4	2-3	1	0	
Prioritization	(4)	4	2-3	1	0	
Relationship	(4)	4	2-3	1	0	
Nursing Interventions	(4)	4	2-3	1	0	
Outcomes/ Evaluation	8	7-8	5-6	1-4	0	
Discharge plan/ Patient teaching	4	4	2-3	1	0	
Documentation Skills (grammar/format)	8	7-8	5-6	1-4	0	
TOTAL	100	X	X	X	X	_____

NANDA-APPROVED NURSING DIAGNOSES

The following list is the most commonly used nursing diagnosis. They will be arranged according to RAM and used in medical-surgical, pediatric, obstetric and psychiatric patients. They are arranged only to assist the student select the most appropriate nursing diagnosis. Many of the diagnoses can be used for any type of patient.

PHYSIOLOGICAL MODE

OXYGENATION

BODY SYSTEMS: CARDIOVASCULAR, RESPIRATORY, AND HEMATOLOGIC

Medical-Surgical

Common Causes (related factors):

Anemia	Pneumonia
Asthma	Pain
COPD	PVD
CHF	Stroke
End of life	Surgery
MI	

Airway clearance, ineffective: Inability to clear secretions or obstructions from the respiratory tract to maintain a clear airway.

Aspiration, risk for: At risk for entry of gastrointestinal secretions, oropharyngeal secretions, solids or fluids into tracheobronchial passages.

Breathing pattern, ineffective: A state in which the rate, depth, timing, rhythm or chest/abdominal wall excursion during inspiration, expiration or both; does not maintain optimum ventilation for the individual.

Cardiac output, decreased: A state in which the blood pumped by the heart is inadequate to meet the metabolic demands of the body.

Gas exchange, impaired: Excess or deficit in oxygenation and/or CO₂ elimination at the alveolar-capillary membrane (Must be supported with abnormal oxygen saturation, need for oxygen therapy, and or abnormal ABGs)

Tissue perfusion, ineffective (specify type) (renal, cerebral, cardiopulmonary, gastrointestinal, peripheral): Decrease in oxygen resulting in the failure to nourish the tissues at the capillary level.

Pediatrics

Sudden Infant Death Syndrome, risk for: Presence of risk factors for sudden death of an infant under 1 year of age.

Intensive Care Patients

Ventilatory weaning response, dysfunctional: Inability to adjust to lowered levels of mechanical ventilator support that interrupts & prolongs the weaning process.

NUTRITION

BODY SYSTEMS: GASTROINTESTINAL, ENDOCRINE, and NEUROLOGICAL

Common Causes:

- | | |
|------------------------------------|---------------|
| Acute abdomen disorders | Liver disease |
| Absorption disorders | Obesity |
| Cancer | Pain |
| Chronic gastrointestinal disorders | Pancreatitis |
| Diabetes | Renal disease |
| Depression | Stroke |
| Fatigue | Stress |

Nausea: A subjective unpleasant, wavelike sensation in the back of the throat, epigastrium, or throughout the abdomen that may lead to the urge or need to vomit.

Nutrition, imbalanced: Less than body requirements: Intake of nutrients insufficient to meet metabolic needs.

Nutrition, imbalanced or risk for: More than body requirements: Intake of nutrients that exceeds metabolic needs.

Oral mucous membrane, impaired: Disruptions of the lips and soft tissue of the oral cavity.

Swallowing, impaired: Abnormal functioning of the swallowing mechanism associated with deficits in oral, pharyngeal or esophageal structure or function.

Pediatrics

Growth, risk for disproportionate: At risk for growth above the 97th percentile or below the 3rd percentile for age, crossing two percentile channels; disproportionate growth.

Infant feeding pattern, ineffective: An impaired ability to suck or coordinate the suck-swallow response.

ELIMINATION

BODY SYSTEMS: GASTROINTESTINAL, GENITOURINARY, NEUROLOGICAL

Common Causes:

- | | |
|-----------------|------------------------|
| Cancers | UTI |
| Chronic disease | Obesity |
| Dehydration | Prostate disorders |
| Diet | Neurological disorders |
| Drugs | Stroke |
| Infection | Surgery |

Constipation or risk for: At risk for a decrease in normal frequency of defecation accompanied by difficult or incomplete passage of stool and/or passage of excessively hard, dry stool.

Diarrhea: Passage of loose, fluid, unformed stool.

Incontinence, bowel: Change in normal bowel habits characterized by involuntary passage of stool.

Incontinence, urine: Continuous or unpredictable loss of urine.

Urinary elimination, impaired: Disturbance in urine elimination.

Urinary retention: Incomplete emptying of bladder.

Pediatrics

Urinary elimination, readiness for enhanced: A pattern of urinary functions that is sufficient for meeting eliminatory needs and can be strengthened.

ACTIVITY & REST

BODY SYSTEMS: MUSCULOSKELETAL, NEUROLOGICAL, CARDIOVASCULAR, AND HEMATOLOGIC

Common Causes:

Acute illness

Anemia

Fractures

Heart disease; CHF

Insomnia

Musculoskeletal trauma or disorders

Lung disease: pneumonia, COPD

Obesity

Orthopedic surgery

Neurological disease; stroke

Pain

Peripheral vascular disease

Medical –Surgical and Pediatrics

Activity intolerance or risk for: Insufficient physiological or psychological energy to endure or complete required or desired daily activities.

Fatigue: An overwhelming sense of exhaustion & decreased capacity for physical & mental work regardless of adequate sleep.

Falls, risk for: Increased susceptibility to falling that may cause harm.

Mobility, impaired physical: Limitation in independent purposeful physical movement of the body or of one or more extremities

Peripheral neurovascular dysfunction, risk for: At risk for disruption in circulation, sensation, or motion of an extremity

Self-care deficit: an impaired ability to perform or complete following activities for oneself:
Bathing/Hygiene; Dressing/Grooming; Feeding; Toileting

Sleep pattern disturbance: Time-limited disruption of sleep (natural, periodic suspension of consciousness) amount and quality

Surgical Recovery, Delayed: Extension of the number of postoperative days required for individuals to initiate and perform on their own behalf activities that maintain life, health, and well-being.

PROTECTION

BODY SYSTEMS: INTEGUMENTARY AND IMMUNOLOGICAL

Common Causes:

Burns	Tubes and catheters
Cancer	Radiation therapy
Chemotherapy	Skin trauma
Chronic disease	Skin diseases
Diabetes	Steroid therapy
Infection	Wounds
Immunosuppression	

Medical-Surgical and Pediatrics

Hyperthermia: Body temperature is elevated above his/her normal range.

Hypothermia: Body temperature is below normal range.

Infection, risk for: An increased risk for being invaded by pathogenic organisms.

Injury, risk for: At risk of injury as a result of environmental conditions interacting with individual's adaptive & defensive resources. (See also Poisoning, risk for; Suffocation, risk for; Trauma, risk for)

Protection, ineffective: Decrease in the ability to guard the self from internal or external threats, such as illness or injury.

Skin integrity, impaired or risk for: Altered epidermis or dermis.

Pediatrics

Poisoning, risk for: Accentuated risk of accidental exposure to or ingestion of drugs or dangerous products in doses sufficient to cause poisoning.

FLUID & ELECTROLYTES

BODY SYSTEMS: CARDIOVASCULAR, ENDOCRINE, RENAL AND NEUROLOGICAL

Common Causes:

Heart disease, Renal disease, Endocrine disorders

Fluid volume deficit or risk for: Decreased intravascular, interstitial, and/or intracellular fluid.

Fluid volume excess or risk for: Increased intravascular, interstitial, and/or intracellular fluid.

NEUROLOGICAL FUNCTION & SENSES

BODY SYSTEM: NEUROLOGICAL

Common Causes:

Acute illness	Musculoskeletal conditions
Brain disorders; stroke, tumors	Psychological disorders
Cancer	PVD
Chronic disease	Stress
Drugs	Surgery
Infections	Trauma

Adaptive capacity intracranial, decreased: Intracranial fluid dynamic mechanisms that normally compensate for ↑ in intracranial volumes are compromised, resulting in repeated, disproportionate ↑ in ICP in response to a variety of noxious and non-noxious stimuli

Communication, impaired verbal: Decreased, delayed or absent ability to receive, process, transmit and use a system of symbols.

Confusion, acute: Abrupt onset of a cluster of global, transient changes and disturbances in attention, cognition, psychomotor activity level of consciousness, and/or sleep/wake cycle.

Confusion, chronic: Irreversible, long-standing, and/or progressive deterioration of intellect and personality characterized by ↓ ability to interpret environmental stimuli, ↓ capacity for intellectual thought processes, & manifested by disturbances of memory, orientation, & behavior

Dysreflexia, autonomic or risk for: Life threatening uninhibited sympathetic response of the nervous system to a noxious stimulus after a spinal cord injury at T7 or above.

Memory, impaired: Inability to remember or recall bits of information or behavioral skills. (Impaired memory may be attributed to pathophysiologic or situational causes that are either temporary or permanent.)

Pain: An unpleasant sensory and emotional experience arising from actual or potential tissue damage or described in terms of such damage; sudden or slow onset of any intensity from mild to severe with an anticipated or predictable end and a duration of less than six months.

Pain, chronic: An unpleasant sensory and emotional experience arising from actual or potential tissue damage or described in terms of such damage; sudden or slow onset of any intensity from mild to severe, constant or recurring without an anticipated or predictable end and a duration of greater than six months.

Peripheral neurovascular dysfunction, high risk for: At risk for disruption in circulation, sensation, or motion of an extremity.

Sensory/perception disturbed (specify) (visual, auditory, tactile, kinesthetic, gustatory, olfactory): Change in amount or patterning of incoming stimuli accompanied by a diminished, exaggerated, distorted, or impaired response to such stimuli.

Unilateral neglect: Lack of awareness and attention to one side of the body.

PSYCHOSOCIAL MODES

SELF-CONCEPT

Common Causes of problems with self:

Body image	
Hospitalization	Mental illness
Illness: acute and chronic	Pain
Loss of independence	Perceived threats
Loss of loved ones	Socioeconomic factors
Loss of body parts	Stress

Anxiety: Vague uneasy feeling of discomfort or dread accompanied by an autonomic response (the source often non-specific or unknown to the individual); a feeling of apprehension caused by anticipation of danger. It is an alerting signal that warns of impending danger and enables the individual to take measures to deal with threat.

Body image disturbance: Confusion in mental picture of one's physical self.

Coping, ineffective: Inability to form a valid appraisal of the stressors, inadequate choices of practiced responses, and/or inability to use available resources.

Decisional conflict (specify): Uncertainty about course of action to be taken when choice among competing actions involves risk, loss, or challenge to personal life value

Denial, ineffective: conscious or unconscious attempt to disavow knowledge or meaning of an event to reduce anxiety/fear to the detriment of health.

Failure to Thrive, Adult: Progressive functional deterioration of a physical and cognitive nature; the individual's ability to live with multi-system diseases, cope with ensuing problems, and manage his/her care are markedly diminished

Fear: Response to a perceived threat that is consciously recognized as a danger.

Grieving, dysfunctional and risk for: Extended, unsuccessful use of intellectual and emotional responses by which individuals, families and communities attempt to work through the process of modifying self-concept based upon the perception of loss.

Hopelessness: Subjective state in which an individual sees limited or no alternative or personal choices available & is unable to mobilize energy on own behalf.

Memory, Impaired: Inability to remember or recall bits of information or behavioral skills. (May be attributed to pathophysiologic or situational causes that are either temporary or permanent.)

Personal identity disturbed: Inability to distinguish between self & non-self.

Post-trauma syndrome or risk for: Sustained maladaptive response to a traumatic, overwhelming event.

Powerlessness or risk for: Perception that one's own action will not significantly affect an outcome; a perceived lack of control over a current situation or immediate happening.

Relocation stress syndrome or risk for: Physiological and/or psychosocial disturbances following transfer from one environment to another.

Self-esteem, chronic low: Long-standing negative self-evaluation/feelings about self or self-capabilities.

Self-esteem, situational low or risk for: Development of a negative perception of self-worth in response to a current situation (specify).

Self-mutilation, or risk for: Deliberate self-injurious behavior causing tissue damage with the intent of causing nonfatal injury to attain relief of tension.

Sexual dysfunction: Change in sexual function that is viewed as unsatisfying, unrewarding, or inadequate.

Spiritual distress or risk for: Impaired ability to experience and integrate meaning and purpose in life through a person's connectedness with self, others, art, music, literature, nature, or a power greater than oneself.

Sorrow, Chronic: Cyclical, recurring, and potentially progressive pattern of pervasive sadness that is experienced by a client (parent or caregiver, or individual with chronic illness or disability) in response to continual loss, throughout the trajectory of an illness or disability

Suicide, risk for: At risk for self-inflicted, life threatening injury.

Thought processes, altered: Disruption in cognitive operations and activities.

Violence, risk for (self-directed or other directed): Behaviors in which an individual demonstrates that he/she can be physically, emotionally, and/or sexually harmful to self or others.

ROLE FUNCTION: Includes adaptation and management of acute and chronic illness.

Common causes:

- Acute and chronic disease
- Disability
- Family
- Hospitalization
- Injury
- Lack of knowledge of role expectations

- Lack of resources to perform role
- Loss of independence
- Loss of support
- Mental illness
- New role
- Socioeconomic factors

Adjustment, impaired: Inability to modify lifestyle/behavior in a manner consistent with change in health status.

Caregiver role strain: A caregiver's perceived difficulty in performing the family caregiver role.

Coping, compromised family: Usually supportive person (family member or close friend) provides insufficient, ineffective, or compromised support, comfort, assistance, or encouragement that may be needed by the client to manage or master adaptive tasks related to his/her health challenge.

Coping, disabled family: Behavior of significant person (family member or other primary person) that disable his/her own capacities & the patient's capacities to effectively address tasks essential to either person's adaptation to the health *challenge*.

Conflict, parental role: Parent experience of role confusion and conflict in response to crisis.

Diversional activity deficit: Decreased stimulation from (or interest or engagement in) recreational or leisure activities.

Health maintenance, ineffective: Inability to identify, manage, &/or seek help to maintain health.

Ineffective management of therapeutic regime: Pattern of regulating and integrating into daily living a program for treatment of illness that is satisfactory for meeting specific health goals.

Knowledge deficit (specify): Absence or deficiency of cognitive information related to a specific topic.

Noncompliance (specify): Behavior of person and/or caregiver that fails to coincide with a health-promoting or therapeutic plan agreed on by the person (and/or family and/or community) and health-care professional.

Powerlessness, risk for: At risk for perceived lack of control over a situation and/or one's ability to significantly affect an outcome.

Role performance, ineffective: Patterns of behavior and self-expression that do not match the environmental context, norms, and expectations.

Pediatrics

Attachment Parent/ Infant/ Child, risk for impaired: Disruption of the interactive process between parent/ significant other, child and infant that fosters the development of a protective and nurturing reciprocal relationship.

Breastfeeding, ineffective: Dissatisfaction or difficulty a mother, infant or child experiences with the breastfeeding process.

Delayed growth & development, risk for delayed: Deviations from age-group norms.

Parental role conflict: Parent experience of role confusion & conflict in response to crisis.

Parenting, impaired or risk for impaired: Inability of primary caregiver to create, maintain or regain an environment that promotes the optimum growth & development of a child.

Sudden Infant Death Syndrome, risk for: Presence of risk factors for sudden death of an infant under 1 year of age.

INTERDEPENDENCE: The ability to give and receive respect, love, value, and affection.

Common causes:

Acute and chronic disease

Disability

Inability to maintain relationships

Isolation

Lack of family or friends

Loss of loved ones

Mental illness

Socioeconomic factors

Family process, dysfunctional: alcoholism: Psychosocial, spiritual, & physiologic functions of family unit are chronically disorganized, leading to conflict, denial of problems, resistance to change, ineffective problem solving, and a series of self-perpetuating crises.

Loneliness, risk for: A subjective state in which an individual is at risk of experiencing vague dysphoria

Social isolation: Aloneness experienced by an individual & perceived as imposed by others and as a negative or threatened state.

Therapeutic regimen management, ineffective family: Pattern of regulating and integrating into family processes a program for treatment of illness and the sequelae of illness that is unsatisfactory for meeting specific health needs.

Pediatrics

Parent/infant/child attachment, altered, risk for: Disruption of the interactive process between parent/significant other and infant that fosters the development of a protective and nurturing reciprocal relationship.

Parenting, risk for impaired: Risk for inability of the primary caretaker to create, maintain or regain an environment that promotes the optimum growth and development of the child.

NANDA: Spring 2007

Name _____
 Lab _____

Cerritos College
 Nursing Department
N212: Medical Surgical Nursing
 Oral Medication Module



Instructions: Complete 2 “patient” medication preparation scenarios by the medication testing day. You may work individually or in groups of two. You may complete as many scenarios as you wish, but only two are required.

PLEASE DO NOT OPEN THE MEDICATION PACKAGES!!!!!!!!!!!!

1. Choose one patient.
2. Gather the MAR, physician’s order sheet and pull the medication drawer from the medication cart for the patient you have chosen.
3. Review the physician’s order sheet and the MAR and check for accuracy. Note any errors found.
4. Using your Mosby drug book, look up all of the medications ordered in preparation for administration (despite times ordered).
5. Note any errors found.
6. Note any information you would need to gather before administering the medication: why is this medication given (look at diagnosis and history), dosage and range, nursing considerations (ex: antihypertensive medication, check BP before administration) and common side effects (try to group side effects if possible (Ex: nausea/vomiting/diarrhea should be GI distress). Complete dosage calculation if needed.
7. Remove the medications from the medication drawer in preparation for administration (5 “rights”). Note any errors or concerns.
8. Review the steps for administration that you would complete at the patient’s bedside (5 “rights”)
9. Complete the documentation below
10. Review the errors/concerns found with the AED 90.47 faculty member or AED 90.47 student worker and have him/her sign below verifying completion.
11. Repeat the above steps for a second patient.

Date	Patient Name	Faculty/Staff Signature

***Submit this form on medication testing day to your clinical instructor.**

Medication Administration Grid

Type of Injection	Site	Depth of Injection	Needle Gauge	Needle Length	Size of Syringe	Amount of Medication	Angle of Needle	Bunch or Stretch	Aspirate
IM	Deltoid	Muscle	23G-25G	5/8-1 ½ in	2-3 mL	.5mL-1mL	90	Stretch	YES
IM	Dorsogluteal	Muscle	18G-23G	1 ¼-3 in	2-5mL	1-4mL	90	Stretch	YES
IM	Ventrogluteal	Muscle	20-23G	1 ¼-3 in	2-5mL	1-4mL	90	Stretch	YES
IM	Vastus Lateralis	Muscle	20-23G	1 ¼-3 in	2-5mL	1-4mL	90	Stretch	YES
SQ-misc meds	Usually fat pads lateral upper arms and other sites if need to rotate	Subcutaneous	25-27G	½-5/8 in	1-3mL	Up to 1mL	45 or 90	Bunch or stretch	NO
SQ-Insulin	Rotate sites-lateral upper arms, abdomen, upper hips, thighs, upper back	Subcutaneous	25-27G	½-5/8 in	Insulin syringe	Up to 1mL	45 or 90	Bunch or stretch	NO
SQ-heparin	Abdomen-rotate sites. From 2" below umbilicus from iliac crest to crest	Subcutaneous	25-27G	½-5/8	1-3 mL	Up to 1mL	45 or 90	Bunch or stretch	NO
ID-usually skin testing	Forearm-3 to 4 finger widths below antecubital space(preferred site)	Subcutaneous	25-27G	½-5/8 in	TB syringe	.01-.05 mL	10-15	Stretch	NO

Concept Mapping Guidelines “The Art of Nursing”

I. What is it?

- Concept mapping is a visual representation of key concepts and relationships that deal with a specific subject matter.
- Also known as Mind Maps, Cognitive Maps, Flow Charts, and Graphic Organizers.
- Can be used to represent the nursing process, medical diagnosis, or a nursing concept (e.g. immobility, skin integrity)
- Concept Maps shows relationships between concepts using shapes and links. Shapes (boxes or circles) represent concepts; links (solid or dotted lines) represent relationships.

II. Why use it?

- Learners learn not by memorizing but by organizing and relating concepts into their cognitive structures.
- Facilitates critical thinking.
- Utilizes an active process of thinking and drawing relationships.
- Promotes meaningful learning and allows the student to see the whole picture.

III. How do you do it?

Required Materials: blank paper, colored pencils/pens/markers, and your imagination

General Guidelines

- Use just key words, or wherever possible images
- Make the primary concept the strongest visual image
- Put keywords on lines (medimap)
- Print rather than write in script. Do not write in all CAPS
- Use color to depict themes, relationships, and to make ideas stand out.
- Think three dimensionally.
- Use arrows, icons, or other visual aids to show links between different elements
- Don't get stuck in one area, if you dry up in one area, do another branch.
- Put ideas down as they occur, don't judge or hold back.
- Break boundaries. If you run out of space, don't start a new sheet, paste more paper onto the map (Break the 8x11 mentality)
- Be creative. Creativity aids memory.
- Get involved. Have fun.

(Retrieved from <http://www.peterussell.com/MindMaps/Howto.html> on 7/6/2004)

Draw 2 different types of maps: one representing the Medical/Surgical Diagnoses (two diagnoses can be represented on two separate Medimaps) and the second type using the Nursing Process (with Nursing Diagnoses)

To draw the Medical/Surgical Map (Medimap) :

1. Begin with Medical/Surgical Diagnosis
2. Identify the general categories which include: pathophysiology, signs and symptoms (diagnostic tests), treatment (Medical to include: pharmacological and non-pharmacological), and nursing interventions.
3. Draw the concept maps using shapes for concepts, and links to show relationships.
4. Use different colors to differentiate the various concepts
5. Create a key identifying the symbols, links, and colors and what they represent

To draw the Nursing Map:

10. Start with a box in the center. Enter the reason the patient is seeking health care (medical or surgical diagnosis).
11. Working out from the center, create a box for every major problem (key concepts) you have identified.
12. Support every major problem with clinical patient data to include physical assessment findings, treatments, medications, abnormal diagnostic and lab tests, medical history, emotional state and pain.
13. Include nursing interventions for each problem identified.
14. Identify the key assessments that should be done for this patient and list in the center box under key assessments.
15. If there is data that doesn't fit and you don't know where to place it, create a separate box off to the side of the diagram.
16. Draw lines between the boxes to show relationships between related problems
17. Number each box to prioritize problems
18. Label each problem with a nursing diagnosis

IV. Evaluation Criteria

A. Medical/Surgical Map:

- Are all the major concepts and general categories presented?
- Is your information accurate, inclusive, and thorough?
- Is a key included?
- How were the connecting lines drawn? Are they logical? Did the student show an understanding of the whole picture?
- Is your concept map neat, legible, logical, visually appealing, easy to follow?

B. Nursing Map

- Is the patient in the center?
- Is the assessment data present and accurate and pertinent?
- Are the nursing diagnoses supported by your findings?
- Are the nursing interventions appropriate?
- Is patient teaching included?
- How were the connecting lines drawn? Are they logical? Did the student show an understanding of the whole picture?
- Is your concept map neat, legible, logical, visually appealing and easy to follow?



Be Creative!!!

NPW and Assessment Guide Guidelines

General Instructions:

- ❖ All work must be neat and legible
- ❖ NPW to be completed on EVERY patient cared for in the clinical setting BEFORE you provide nursing care to the patient
- ❖ Complete an assessment guide for ONE patient and submit each week
- ❖ Staple any additional papers
- ❖ Highlight any abnormal findings on the Assessment Guide
- ❖ Make extra blank copies and keep them in your clinical folder
- ❖ If no order can be found, write "no order".

NPW Page 1

Student: write your full name

Date: date(s) caring for patient

Co-Assigned Nurse/NA: Nurse and nursing assistant assigned to the patient

Patient Initials: Remember HIPPA regulations and only put the patient's initials

Room #: The room number of the patient

Age: Age of the patient

Admit date: The date the patient was admitted to the facility

Surgery date: If applicable, state the date the patient had surgery relevant for the current admission

Code Status: The resuscitation status for the patient. Ex: DNR, No Code, Full Code, No CPR

Allergies: State all allergies to medications, food, environment

Admitting diagnosis: State the diagnosis given for reason for admission. Ex: Pneumonia.

May not have admitting diagnosis in long term care. May only have chronic diagnoses.

Ask your instructor for assistance as necessary.

History of present illness: Describe the events that occurred from time of onset of illness to time of admission. May not have in long term care.

Course of events in hospital: What major events occurred from the time of admission to the time you assume care. Ex: Admitted with R/O Myocardial Infarction. That diagnosis was ruled out. Patient was found to have a hiatal hernia causing him chest pain and is schedule for surgery (fundoplication) to repair the hiatal hernia. **Will not complete in long term care.**

Hx: State the patient's significant past medical and surgical history. Ex: History of COPD, osteoarthritis, cataracts in the right eye

MD Orders

***ONLY MD ORDERS FROM THE ORDER SECTION OF THE CHART ARE ENTERED IN THIS SECTION**

Vital Signs: Frequency ordered Ex: every 4 hours.

Diet/Feedings: Diet ordered and/or tube feedings (name of solution, volume to be administered, continuous vs. intermittent)

Activity: The activity level ordered

IVF: Intravenous fluids ordered for continuous infusion only. Ex: D5.45NS @ 100 ml/hr. Any piggyback solutions are written under medications

Blood glucose monitoring: Frequency ordered Ex: QAC and HS (before meals and before bedtime).

Treatments/Nursing Orders: This section should include any additional orders for the patient. Ex: strict I/O, wet to dry dressing change every 8 hours, Foley catheter, O2 at 2L NC.

Diagnostic Results

- ❖ **Should be the most recent lab results**

Record the normal range for each lab result

-Urine: *specify which urine test you are referring to.* Ex: culture normal (-), patient result is + for E.Coli

-X-ray: *specify which X-ray is done.* Ex: CXR normal is (-) and patient result is right lower lobe infiltrate

N212: Medical Surgical Nursing 1 Course Packet

Record the reason for patient values.

-If normal: state WNL. If this normal is unexpected, also state this and why

Ex: WBC is normal for a patient admitted with pneumonia is an abnormal finding, but could be explained in a patient that is immunocompromised

-If abnormal: state the reason the value is abnormal. Ex: Elevated WBC in a patient with pneumonia occurs because of response to inflammation and infection.

NPW Page 2

Create a concept map to represent the following information: pathophysiology, signs and symptoms, medical treatment and nursing interventions.

- ❖ In long term care, you may create concept maps for chronic medical problems. Ideally ones that have signs and symptoms you can observe and that have nursing interventions you can implement.
- ❖ In N212, create a concept map for every admitting medical/surgical diagnosis and additional concept maps if the patient has diabetes, hypertension, COPD and chronic renal failure (ESRD, CRD, is on dialysis).

Medications Page 3

Drug Names: State the trade (one) and the generic name of the medication

Class: State both the functional and chemical class for each drug.

Dosage and range: State the normal dosage range for this person (ex: elderly) and the dosage ordered for the patient

Route: State the route ordered for the patient. Ex: oral, intramuscular, subcutaneous, etc.

Indication for use for this patient and nursing implications: Why is this medication ordered for this patient? State any nursing implications for the administration of this medication. Ex: Check BP before administering an antihypertensive.

Time and frequency: State when the drug is ordered to be administered and the frequency of administration. Ex: Ordered twice a day and the administration times are 0900 and 2100

- ❖ Attach additional paper if needed

Documentation Page 4

Use this area for documentation as directed by your clinical instructor. You may be instructed to document a narrative, DAR, SOAPIE note or any variation that may be used by your facility.

Assessment Guide

The Assessment Guide is based on the diagnostic divisions based on the Roy Adaptation Model. The RAM diagnostic divisions page should be used as a guide to assist you in figuring out what information should be included in each section. This page is arranged in a stepwise approach, addressing each piece of information as you complete the Assessment Guide chart. Eventually this will become second nature and you will not have to refer to the diagnostic divisions page for reference.

Once the data collection is completed, you will be directed from your clinical instructor on how many complete diagnostic divisions should be thoroughly completed, starting with one, adding more sections as you become more proficient.

Neurological Function

-Subjective Data

LOC, GCS (eye opening, verbal response, motor response), seizures (describe, timing), altered mental status, aphasia, intellectual functioning; PERRLA; special devices like hearing aids or glasses

-Lab results: radiology (EEG, MRI, etc)

Include Sensation

-Subjective Data

-Pain (location, intensity, character, onset and duration), vision, hearing, response to sensory overload

Oxygenation : Gas Exchange

-Subjective Data

-Respiratory Rate, Depth, Effort, Breath Sounds (describe, location), Cough (describe), Sputum production (describe)

-Lab results: Sputum C&S, radiology results, ABG

-Interventions: oxygen (flow rate and method), pulse oximetry (% on how much oxygen), incentive spirometer (volume, frequency of use), suctioning (type, frequency, response)

Oxygenation: Gas Transportation

-Subjective Data

-Blood pressure, apical pulse, peripheral pulses (location, rhythm and strength), edema (degree, location), capillary refill (location), skin/mucous membranes, Homan's sign (if appropriate); Heart sounds (S1,S2, extra heart sounds or murmurs)

-Lab results: Hgb, Hct, RBC, platelets, PT/PTT, INR

Fluid and Electrolytes

-Subjective Data

-Changes in daily weights, thirst, 24 hour intake/output, abnormal loss (edema, drainage, diuresis, diaphoresis, tachypnea, diarrhea, emesis), tissue turgor, mucous membranes; IVF (solution, tonicity of solution, flow rate), NG drainage (amount, describe)

-Lab results: Na; Cl; K; ABG: HCO₃, pH; Urine specific gravity

Endocrine Function

-Subjective Data

-Diabetes Mellitus, Thyroid, Parathyroid, Reproductive function (last menstrual period, menopause, infertility, changes in sexual function)

-Lab results: Thyroid (TSH, T₃, T₄), blood sugar, estrogen, other

Nutrition

-Subjective Data

-Height, Weight, Ideal body weight, Nutrition intake, NPO status and reason, food intolerances, nausea, emesis (describe), swallowing ability, gag reflex, oral cavity (inspect and describe), cultural preferences

-Lab results: Cholesterol (HDL, LDL), blood sugar, Ca, K, Na, Albumin

-Diet; Enteral feedings (tube type, formula and flow rate), TPN/Lipids

Elimination

-Subjective Data

-Abdomen (inspection, auscultation, palpation), urine (describe), Flatus, Stool (describe), last bowel movement

-Lab results: Urinalysis/Culture, Serum: BUN, creatinine, RBCs, WBCs, stool specimen results, radiological studies

-Presence of catheter vs. voiding, colostomy/ileostomy, bladder irrigation

Activity and Rest

-Subjective Data

-Activity level and tolerance

-Muscle and joints (description, movement, strength, coordination), posture/gait (describe), circulation/sensation/movement (describe), rest and sleep patterns (describe) -Lab results: Ca, Phos, Mg, radiological results

-assistive equipment-cast, trapeze, traction, CPM, etc, special beds (type)

Protection

-Subjective Data

-Temperature, Shivering, Diaphoresis, Skin/Hair/Nails (describe), Lesions (describe, location), Incisions (describe, location), IV site (describe, location), AV shunt (describe)

-Lab results: WBC, C&S (specify source: wound, sputum)

Wound dressing (location, describe), drainage tubes (type, site, describe), Isolation, Restraints (Type, reason)

Psychosocial Modes

-Include Subjective and Objective Data for each section

-Self Concept: Physical Self: body sensation (subjective/objective), body image (subjective/objective)

Personal Self: self consistency (subjective/objective), self ideal (subjective/objective), moral/ethical/spiritual (subjective/objective)

-Role Function: Primary role: sex and age, developmental stage;

Secondary roles: Instrumental behaviors, expressive behaviors

Tertiary roles: Instrumental behaviors, expressive behaviors

-Interdependence: significant others (receiving behaviors, giving behaviors), support systems (receiving behaviors, giving behaviors)

Nursing Process Worksheet

Student: _____ Date(s): _____
 Co-Assigned Nurse/Nursing assistant _____
 Patient Initials: _____ Room # _____ Age/Sex _____
 Admit Date: _____ Surgery Date: _____
 Code Status: _____ Allergies: _____

Admitting Dx:

History of present illness:

Hx:

Course of events in hospital:

MD Orders from Physician Order Section of Chart

Vital Signs
 (Frequency) _____

Diet/Feedings: _____

Activity: _____

IVF _____

Blood glucose monitoring
 (frequency) _____

Treatments/ Nursing Orders (I/O, Dressing, Drains, Foley, Oxygen,
 Restraints, Fluid Restriction, Specimens):

	Result and (↓ ↑)	Normal Range	Reason for patient values
Na+			
K+			
Cl-			
Ca+			
Albumin			
Creatinine			
BUN			
Glucose			
WBC			
RBC			
Hgb			
Hct			
Platelets			
PT			
PTT			
INR			
Urine			
X-ray			
147			

N212: Medical Surgical Nursing 1 Course Packet
Laboratory and Diagnostic Results

Identify the MAIN medical/ surgical diagnosis and one chronic medical diagnosis:

1. Define and explain the pathophysiology of each diagnosis.
2. State the expected signs and symptoms for each diagnosis identified.
3. List treatment and nursing interventions appropriate for each diagnosis.
4. In N212, all of the following chronic conditions should be completed: diabetes, hypertension, COPD, renal failure

N212: Medical Surgical Nursing 1 Course Packet
MEDICATION CHART

Drug Names (trade/generic) Class (functional/chemical)	Dosage and Range	Route	Indication for use for this Patient and Nursing Implications	Time + Frequency

N212: Medical Surgical Nursing 1 Course Packet

DOCUMENTATION

N212: Medical Surgical Nursing 1 Course Packet
ASSESSMENT GUIDE

Client Initials: _____ Room #: _____ Date(s): _____

Diagnostic Divisions	Subjective/ Objective Data	Diagnostic Divisions	Subjective Objective Data
Neurological Sensation	PE: Labs:	Fluid Electrolytes	PE: Labs:
Oxygenation Gas Exchange	PE: Labs:	Endocrine	PE: Labs:
Oxygenation Gas Transportation	PE: Labs:	Nutrition	PE: Labs:

N212: Medical Surgical Nursing 1 Course Packet
NURSING PROCESS WORKSHEET

Student: Nancy Nurse Date(s): 2/4-2/5
 Co-Assigned Nurse/NA: Barbara RN, Joan CNA
 Patient Initials: DS Room # 118B Age/Sex 78 M
 Admit Date: 2/3/05 Surgery Date: N/A
 Code Status: DNR Allergies: NKA

Lab Group G

Admitting Dx: Chest Pain

History of present illness:
 CP started at 10pm 2/2. Pain rated 8/10 substernal. Also with c/o SOB and weakness. Pain did not resolve with rest. Drove self to ER

Course of Events in Hospital:
 2/3/05 CXR showed BLL pneumonia; chest pain now thought to be pleuritic not cardiac in nature

Hx: HTN, Diabetes, Atrial fibrillation, Osteoarthritis

MD Orders:

Vital Signs (Frequency) Q8 hours
 Diet/Feedings: 2gm Na ADA
 Activity: BRP
 IVF D5.45 NS @ 100 ml/hr
 Blood glucose monitoring (frequency) Q AC, HS

Treatments/ Nursing Orders (I/O, Dressing, Drains, Foley, Oxygen, Restraints, Fluid Restriction, Specimens):

- ❖ O2 @ 2L NC
- ❖ Right heel stage III wet to moist drsg Δ Q8 hours
- ❖ I/O

	Result and (↓ ↑)	Normal Range	Reason for patient values
Na+	144	136-145	WNL
K+	4.0	3.5-5.0	WNL
Cl-	102	98-106	WNL
Ca+	8.5	9.0-10.5	WNL
Albumin	3.8	3.5-5.0	WNL
Creatinine	0.6	(M) .6-1.2 (F) .5-1.1	WNL
BUN	11	10-20	WNL
Glucose	205 ↑	70-105	Hx of diabetes and has active infection
WBC	18 ↑	5,000-10,000	Active infection: pneumonia
RBC	5.2	(M) 4.7-6.1 (F) 4.2-5.4	WNL *normal range for male
Hgb	16.0	(M) 14-18 (F) 12-16	WNL *normal range for male
Hct	48	(M) 42-52 (F) 37-47	WNL * normal range for male
Platelets	200,000	150,000-400,000	WNL
PT	12.5	11-12.5	WNL
PTT or aPTT	62	60-70 30-40	WNL
INR	2.3	depends on indication	WNL for patient with Atrial fibrillation
Urine Urinalysis	Negative	Negative	No UTI
X-ray CXR	BLL Infiltrate	Negative	Pneumonia
C&S Sputum	Gram + Cocci	Negative	Bacterial Pneumonia

N212: Medical Surgical Nursing 1 Course Packet

Identify the MAIN medical/ surgical diagnosis and one chronic medical diagnosis:

1. Define and explain the pathophysiology of each diagnosis.
2. State the expected signs and symptoms for each diagnosis identified.
3. List treatment and nursing interventions appropriate for each diagnosis.
4. In N212, all of the following chronic conditions should be completed: diabetes, hypertension, COPD, renal failure

Pneumonia

Patho: A bacterial invasion in the alveoli in the lungs that causes the initiation of an inflammatory process (WBC + RBC release→consolidation).

Signs & Symptoms:

- ❖ Fever and chills
- ❖ Cough with purulent sputum
- ❖ Pleuritic chest pain
- ❖ Dyspnea
- ❖ Adventitious Breath sounds

Treatment:

- ❖ Antibiotic therapy-specific names helpful
- ❖ Symptom management (Fever, cough)
- ❖ Bronchodilators (sometimes)
- ❖ Hydration
- ❖ CXR
- ❖ Oxygen therapy
- ❖ ABG (sometimes)
- ❖ WBC, sputum culture

Nursing Interventions

- ❖ Fever: Monitor VS Q4 hours, Administer Tylenol, push fluids
- ❖ Cough/Sputum: Send specimen as ordered, push fluids, TCDB (turn, cough, deep breath), breathing treatments (nebulizers)
- ❖ Pleuritic chest pain: Assess pain Q4 hours, Administer Ibuprofen, Nonpharmacological (Positioning, Distraction)
- ❖ Dyspnea: Administer oxygen as ordered, Teach energy conservation and importance of rest
- ❖ Adventitious Lung sounds: Assess lung sounds Qshift and prn, Administer breathing treatments, TCDB

Osteoarthritis

Patho: A progressive process of cartilage loss in joints. An inflammatory process ensues when the body tries to repair the loss cartilage. In the process, bone spurs (osteophytes) are created which result in joint pain, stiffness, deformity and limited range of motion .

Signs & Symptoms:

- ❖ Joint pain (achiness; worse after activity, better at rest)
- ❖ Joint stiffness
- ❖ Creptitus or grinding
- ❖ Joint enlargement

Treatment:

- ❖ Pain relief (anti-inflammatory)
- ❖ Exercise therapy to strengthen surrounding muscle groups, maintain balance
- ❖ Use of assistive devices if needed
- ❖ Use of hot and cold therapy
- ❖ Protect and rest affected joint
- ❖ X-ray, bone density scan

Nursing Interventions

- ❖ Joint pain: Assess pain, administer pain medications, alternative therapy (hot and cold applications, acupuncture, nutritional supplements), exercise therapy
- ❖ Joint Stiffness: Balance rest and activity; hot and cold applications
- ❖ Joint protection: Encourage safe use of assistive devices, encourage patient to obtain an appropriate weight to reduce stress on joints

You will always submit this information in a concept map format- NOT linear like presented here.

N212: Medical Surgical Nursing 1 Course Packet

MEDICATION CHART

Drug Names (trade/generic) Class (functional/chemical)	Dosage and Range	Route	Indication for use for this Patient and Nursing Implications	Time + Frequency
Apo-Pen VK/ penicillin V potassium F: Broad spectrum antiinfective C: natural penicillin	400mg 250-500 mg Q6hours	IV	<ul style="list-style-type: none"> - Bacterial pneumonia (gram + cocci) - Check for PCN allergy - Monitor for overgrowth infections 	QID 1200,0600, 1800,2400
Cleocin/ clindamycin HCL F: antiinfective-misc C: Lincomycin derivative	600 mg 1.2-1.8g/day in 2-4 divided doses	IV	<ul style="list-style-type: none"> - Bacterial pneumonia - Watch for GI symptoms (N/V/D/Abd pain) - Watch for allergic reaction (may occur several days after starting therapy) - Assess for overgrowth infections 	BID 0900, 2100
Proventil/albuterol F: Bronchodilator C: Adrenergic B2-agonist, sympathomimetic, bronchodilator	2.5mg/ml unit dose 2.5mg TID-QID	Inhaled	<ul style="list-style-type: none"> - Bronchodilation to assist breathing difficulty from pneumonia - Assess respiratory function and need for breathing treatment (RR, pulse oximeter, respiratory effort, dyspnea) - Monitor for side effects: tachycardia, palpitations, tremors, anxiety, restlessness, nausea/vomiting 	QID PRN
Oxycodone F: Opiate analgesic C: Semisynthetic derivative	5mg 10-30mg Q4	PO	<ul style="list-style-type: none"> - Reduce pain caused by osteoarthritis and pleuritic chest pain - Monitor CNS changes before and after dose - Check pain level, last dose adm time and resp rate before admin. - Assess for side effects: CNS depression, nausea/anorexia, rash, constipation 	Q 4hours PRN
Tylenol/ acetaminophen F: Nonopiod analgesic C: nonsalicylate, paraminophenol derivative	325mg 325-650mg Q4 hours. Max 4g/day	Po	<ul style="list-style-type: none"> - Fever and could be used for pain management for the osteoarthritis and pleuritic chest pain - Monitor for hepatotoxicity (overdose, given with other hepatotoxic drug, alcoholics) 	Q4hours PRN
Cardura/ doxazosin F: Alpha Blocker, antihypertensive C: Quinazoline	2mg 4-16 mg/day	Po	<ul style="list-style-type: none"> - To lower blood pressure (hx of HTN) - Monitor for side effects (dizziness, orthostatic hypotension) - Check blood pressure before administration - Teach patient to rise slowly from sitting to standing position - First dose given at HS 	Once a day 0900
Coumadin/ warfarin F: Anticoagulant	2.5mg/day Titrated to PT or INR	Po	<ul style="list-style-type: none"> - Prevent embolus formation from atrial fibrillation - Check latest PT or INR and ensure values within desired range before administration - Monitor for s/s of bleeding (bruising, gums, stool, urine) 	Once a day 1600
Humulin R/ regular insulin F: pancreatic hormone C: exogenous unmodified insulin	based on BS result and given according to sliding scale	SC	<ul style="list-style-type: none"> - Lower blood sugar (Hx of diabetes) - Check fingerstick blood sugar ; Monitor hemoglobin A1C results - Monitor for s/s of hyperglycemia (acetone breath, polyuria, fatigue, polydipsia, flushed, dry skin, lethargy) 	QAC, HS 0730,1130,1700,2100

Percocet

DOCUMENTATION

2/5/05
1400

S: "I can't breathe"-----
O: Resp shallow, labored, 30/min. Intercostal retractions present. BS \bar{c} coarse crackles BLL and sibilant -----
wheezes BUL. O2 @ 2L NC c pulse ox 90%.-----
A: Impaired gas exchange-----
P: Administer prn bronchodilator-----
I: Administered Albuterol unit dose via face mask @ 1340-----
E: States "My breathing is better now" Resp regular, unlabored, 22/min. No intercostals retractions. Remains on
O2@2L NC c pulse ox 95%. BS \bar{c} coarse crackles BLL. No wheezing noted. . No apparent distress noted.
Nurse SNCC_____

N212: Medical Surgical Nursing 1 Course Packet

ASSESSMENT GUIDE

Client Initials: **DS** Room #: **118B** Date(s): **2/4-2/5**

Diagnostic Divisions	Subjective/ Objective Data	Diagnostic Divisions	Subjective/ Objective Data
Neurological Sensation	PE: AAOX4, GCS 15 “My hands ache, it must be raining outside”. Pain 5/10 Bil. hands, aching, onset-upon waking, Motrin ↓’d pain to 1/10 Labs: N/A	Fluid Electrolytes -	PE: 2/4: 156 lbs, 2/5 154 lbs. 2 lb wt loss 2/5/05 I: 1500 ml/ O: 2200ml Tissue turgor: good MM: dry Labs: Na: 144, K: 4.0; Cl: 102
Oxygenation Gas Exchange	PE: “I can’t breathe” RR 24, even and labored. O2@ 2L NC with O2 Sat. of 95%. Breath sounds: crackles BLL. Cough productive of mod. amt of thick green/yellow sputum. Labs: CXR: BLL infiltrate	Endocrine -	PE: “I’ve been a type II diabetic for 5 years” Labs: Serum glucose: 205 Fingertstick BS (0730) 198, (1130) 213
Oxygenation Gas Transportation	PE: BP 142/85 lying Apical: 105 S1S2 irregular Radial/pedal 2+ Bil., irregular Edema: none Cap refill BUE/BLE 2 sec Skin color: pink Skin temp: warm MM: pink/dry Labs: H/H: 16/48; RBC: 5.2; platelet: 200,000; PT: 12; PTT: 62; INR: 2.3	Nutrition	PE: “I’m not hungry” Ht: 5’11” Wt. 176 lbs IBW: 166 lbs Intake: Breakfast 30%, Lunch 40% of 2gm Na ADA diet Oral cavity: full dentition, Tongue: pink/dry, no lesions Gums: pink/dry Labs: Glucose: 205; Ca: 8.5; K: 4.0; Na 144; Albumin: 3.8

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Diagnostic Divisions	Subjective/ Objective Data	Diagnostic Divisions	Subjective/ Objective Data
Bowel and Urinary Elimination	<p>PE: Abdomen non-distended, soft, nontender, BS X4-hypoactive. LBM 2/1/05. States "I usually have a bowel movement every day after I eat my bran cereal. I feel constipated" Urine: clear, yellow. Voiding</p> <p>Labs: UA: negative 2/4/05 BUN: 11, Creat: 0.6</p>	Activity/Rest	<p>PE: BRP, Muscle/Joints: no contractures, morning stiffness in B hands. Movement limited in hands. Strength: strong BUE, BLE Coordination: smooth. Able to ambulate independently with steady gait. Posture/gait: kyphotic/ steady CSM: Feet cool, sensation intact, movement intact Sleeps 6 hours a night with one waking for bathroom Labs: Ca: 8.5</p>
Protection	<p>PE: Flu shot in the fall, Pneumovax 1 year ago Temp 100.5 F, No chills Skin: intact, no lesions Hair: fine, even distribution Nails: Smooth, no clubbing Lesion: R heel stage III. 1cmX 1cm, red, serous discharge. IV site: R AC with D5.45 @ 100mL/hr. No s/s infection or infiltration.</p> <p>Lab: WBC: 18</p>	Psychosocial Self Concept	<p>Physical Self "My hands ache" Obj: Rubbing hands together Body Image "I don't like to wear this oxygen, it makes me feel old" Obj: Wearing O2 2L NC Personal Self-Self Consistency "Am I going to have to wear this oxygen forever?" Obj: Tears in eyes Self Ideal "I just want to go back to my normal self" Obj: Performs TCDB exercises, verbalizes desire to learn about medications and treatments to improve. Moral/Ethical/Spiritual "I believe that God will help me through this." Obj: Prays in room. Asks for chaplain to visit</p>
Psychosocial Role Function	<p>Primary Role Sex M Age 68 Ego integrity vs. Despair</p> <p>Secondary Roles Role: Diabetic Instr: Check BS 4X/day at home. Asks about glucose reading. Tries to follow diet Expr: "I know I have to keep my BS under control, I don't want to lose a limb." Role: Husband Instr: Calls wife every day Exp: "I have to get home and be with my wife, she misses me" Tertiary Roles Role: Pneumonia patient Instr: Takes breathing treatments and oral meds, Performs TCDS exercises Exp: "I want to get my breathing back to normal" Role: Masonic member Instr: Attends monthly meetings. Chairperson of fundraising Exp: "It feels good to be a member of a group."</p>	Psychosocial Interdependence	<p>Significant Others Wife and children Rec: Accepts calls and visits from family. Giving: Returns affection, calls wife</p> <p>Support Systems Neighbors Rec: Accepts calls and visits Giving: Participates in informal neighborhood gatherings. Organizes block party every year.</p>

**CERRITOS COLLEGE HEALTH OCCUPATIONS
NURSING 212 CLINICAL SCHEDULE Spring 2008**

WK	Tuesday Assignment	Wednesday Assignment	NPW/AG DUE Thursday Lectures
1	<p>10/21 0700-1100 Clinical Acute Care Orientation</p> <p>Orientation:</p> <ul style="list-style-type: none"> • Facility Policy and Procedures • Clinical Schedule • Tour of Facility • Fingerstick Glucose Monitoring • Charting Forms • Medication Administration • OR Rotations • Shift Report in Post-Conference <p>12-3 SL 105 Control Lab</p>	<p>10/22 0650-1250 Clinical Buddy with RN</p> <p>Skills: bath, bed making, enema, bandages/binders, ROM, positioning, VS, I&O, physical assessment; WITH INSTRUCTOR SUPERVISION: NGT, wound care, Foley cath insertion. Fingerstick glucose monitoring</p> <p>Charting: VS, I&O, practice charting on mock facility assessment form</p> <p>Post-Conference: Share experiences</p> <p>2-4 SL 105 Control Lab</p>	<p>Nothing</p>
2	<p>10/28 0650-1520 Clinical 1 patient</p> <p>Complete NPW (Pg 1-3 including labs, meds, & Medimap on all admitting dx and chronic diagnoses from list)</p> <p>Skills: same as above</p> <p>Charting: VS, I&O, practice charting on mock facility assessment form</p> <p>Post-Conference: Share experiences</p>	<p>10/29 0800-1200 Medication Scenarios</p> <p>Lab A & B SL 121 Lab C & D SL 122 Lab E & F SL 123</p> <p>1-3 SL 109 Control Lab</p>	<p>Due 10/30</p> <ul style="list-style-type: none"> • Complete NPW (pg 1-4) • Assessment Guide (AG) All areas of Physical Mode -no psychosocial

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<p>3</p>	<p>11/4 0650-1520 Clinical 1 patient</p> <p>Complete NPW on 1 pt. (Pg 1-3: labs, meds, & Medimaps on all admitting Dx and chronic Dx from list)</p> <p>Skills: Same skills as above</p> <p>Charting: same as above</p> <p>Post-Conference: Share experiences</p>	<p>11/5 0650-1250 Clinical 1 patient</p> <p>Complete NPW on 1 pt. (Pg 1-3: labs, meds, & Medimaps on all admitting Dx and chronic Dx from list)</p> <p>Skills: same as above</p> <p>Charting: VS, I&O, Nursing flowsheet</p> <p>Post-Conference: Share experiences, OR experiences, Nursimap on 1 patient</p> <p>2-4 SL 121 Control Lab</p>	<p>Due 11/6</p> <ul style="list-style-type: none"> • Complete NPW (pg 1-4) • Complete AG including Psychosocial • Highlight all abnormal PE findings. • Complete Nursimap
<p>4</p>	<p>11/11</p> <p>Veteran's Day</p> <p>HOLIDAY</p>	<p>4/9 0650-1250 Clinical 1 patient</p> <p>Complete NPW on 1 pt. (Pg 1-3: labs, meds, & Medimaps on all admitting Dx and chronic Dx from list)</p> <p>Skills: same as above</p> <p>Charting: VS, I&O, Nursing flowsheet</p> <p>Start OR Rotations</p> <p>Post-Conference: Nursimap on 1 patient. * Discuss patient chosen for Care Plan with instructor</p>	<p>Due 4/10</p> <ul style="list-style-type: none"> • Complete NPW (pg 1-4) • Complete AG • Highlight all abnormal PE findings • Complete Nursimap

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<p>5</p>	<p>11/18 0650-1520 Clinical 1 patient</p> <p>Complete NPW on 1 pt. (Pg 1-3: labs, meds, & Medimaps on all admitting Dx and chronic Dx from list)</p> <p>Skills: PO meds as per instructor schedule, prn meds (SQ/IM) + Same skills as above</p> <p>Charting: VS, I&O, Nursing flowsheet</p> <p>Post-Conference: Share experiences, OR experiences, Assigned Shift Report</p> <p>1220-1520 Lab A Scenario Day</p>	<p>11/19 0650-1520 Clinical 2 patients</p> <p>Complete NPW on 2 pts.</p> <p>Skills: PO meds as per instructor schedule, prn meds (SQ/IM); + Same skills as above</p> <p>Charting: VS, I&O, Nursing flowsheet</p> <p>Post-Conference: Nursimap on 1 patient</p> <p>1220-1520 Lab B Scenario Day</p>	<p>Due 11/20</p> <p><u>For 1 patient only</u></p> <ul style="list-style-type: none"> • Complete NPW + documentation • Complete AG • Highlight all abnormal PE findings • Complete Nursimap <p>**Care Plan Rough Draft Due**</p>
<p>6</p>	<p>11/25 0650-1520 Clinical 1 patient</p> <p>Complete NPW on 1 pt.</p> <p>Skills: PO meds as per instructor schedule, prn meds (SQ/IM); + Same skills above</p> <p>Charting: VS, I&O, Nursing flowsheet</p> <p>Post-Conference: Share experiences, OR experiences, Assigned Shift Report</p> <p>1220-1520 Lab F Scenario Day</p>	<p>11/26 0650-1520 Clinical 2 patients</p> <p>Complete NPW on 2 pts.</p> <p>Skills: PO meds as per instructor schedule, prn meds (SQ/IM); + Same skills as above</p> <p>Charting: VS, I&O, Nursing flowsheet</p> <p>Post-Conference: Nursimap on 1 patient</p> <p>1220-1520 Lab D Scenario Day</p>	<p>Due 11/26 post conference</p> <p><u>For 1 patient only</u></p> <ul style="list-style-type: none"> • Complete NPW • Complete Nursimap

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7	<p>12/2 0650-1520 Clinical 1 patient</p> <p>Complete NPW on 1 pt.</p> <p>Skills: PO meds as per instructor schedule, prn meds (SQ/IM); + Same skills as above</p> <p>Charting: VS, I&O, Nursing flowsheet</p> <p>Post-Conference: Share experiences, OR experiences, Assigned Shift Report</p>	<p>12/3 0650-1520 Clinical 2 patients</p> <p>Complete NPW on 2 pts.</p> <p>Skills: PO meds as per instructor schedule, prn meds (SQ/IM); + Same skills as above</p> <p>Charting: VS, I&O, Nursing flowsheet</p> <p>Post-Conference: Nursimap on 1 patient</p>	<p>Due 12/4</p> <p>For 1 patient only</p> <ul style="list-style-type: none"> No NPW Due. Complete Nursimap only. <p>***CARE PLAN DUE***</p>
8	<p>12/9 0650-1250 Clinical 1 patient</p> <p>Complete NPW on 1 pt.</p> <p>Skills: PO meds as per instructor schedule, prn meds (SQ/IM); + Same skills as above</p> <p>Charting: VS, I&O, Nursing flowsheet</p> <p>Post-Conference: Share experiences, OR experiences, Assigned Shift Report</p> <p>1400-1520 All: ATI Testing Lab A, B, C, D SL 110 Lab E, F SL 101</p>	<p>12/10 0650-1520 Clinical 2 patients</p> <p>Complete NPW on 2 pts.</p> <p>Skills: PO meds as per instructor schedule, prn meds (SQ/IM); + Same skills as above</p> <p>Charting: VS, I&O, Nursing flowsheet</p> <p>Post-Conference: Share Experiences; Work on NPW/AG and turn in to instructor same day</p>	<p>Paperwork due as directed by your instructor</p>
9	<p>12/16 No Clinical</p>	<p>12/17 Final Examination</p>	

Intravenous Fluid Therapy (IV Therapy)

Intravenous Solutions

Isotonic Solutions
D5W: 5% Dextrose in water
0.9% NaCl normal saline, LR: Lactated Ringer's
Hypotonic Solutions
0.45% NaCl: half normal saline
0.33% NaCl: 1/3 strength normal saline
Hypertonic Solutions
D5 ½ NS: 5% Dextrose in 0.45% NaCl
D5NS: 5% Dextrose in Normal saline (0.9% NaCl)
D5LR: 5% dextrose in Lactated Ringer's
D10W: 10% dextrose in water

Equipment

Solution containers- most containers of intravenous fluids come in 500 mL or 1 L flexible plastic (most common) or rigid containers

Tubing- a basic tubing set has a spike on one end which inserts into the container. Next to the spike is a drip chamber, which allows the nurse to visualize the drops per minute as the solution flows from the container into the tubing. Different types of tubing with varying number or size of drops per mL are available. A roller clamp controls the flow rate (tightened to slow the rate and loosened to increase the rate of flow). A side clamp is used to constrict the tubing and cut off flow completely. Most tubing also has a Y-port for administering IV medications through the tubing. At the opposite side of the spike, is a needleless adapter with a protective cap, which is inserted into the IV catheter in the patient's vein. Special infusion sets are necessary if the IV flow rate is to be controlled by an electronic infusion pump.

Regulating and Monitoring IVs:

Regulating Flow: IV flow is regulated either by gravity infusion (manually using the roller clamp) or infusion using an infusion pump.

Calculate the flow rate- see IV calculations

Monitor the infusion at least every hour

- ❖ Count the drip rate
- ❖ Check tubing for position and patency (check for kinking)
- ❖ Observe settings on pump if being used
- ❖ Inspect IV site for swelling, redness, heat, and pain (may indicate phlebitis)

Source: ATI Content Mastery Series Fundamentals for Nursing Review Module Ed 5.1

Potential Problems Associated with Intravenous Therapy

Problem	Signs/Symptoms	Causes	Nursing Interventions
Infiltration	Swelling, pallor, cool and pain around site; decrease in flow rate	Dislodged catheter; vessel wall penetrated by catheter	Discontinue infusion and restart at a different site
Phlebitis	Localized tenderness, redness, warmth, and mild edema of the vein above the insertion site	Trauma from the catheter; chemical trauma from the solution; contaminated by microorganisms	Discontinue infusion. Apply warm moist compresses. Restart infusion at different site.
Thrombus	Same as phlebitis. Also flow may stop if clot obstructs catheter	Trauma from catheter or needle	Same as for phlebitis. Do not rub or massage affected area
Embolus	Depends upon location of any infarction caused by thrombus (e.g., cerebral, pulmonary) perhaps dyspnea or sudden pain	Air enters vein through infusion line; thrombus dislodges from insertion site and travels	Report any sudden pain or breathing difficulty. Prevention: monitor site regularly; do not allow air to enter infusion line
Infection	Fever, chills, malaise, pain, swelling, inflammation, or pus at IV site	Poor sterile technique in inserting and caring for insertion site; contaminated solution	Discontinue infusion; notify PCP Prevention: sterile technique in initiating IV; change dressing and tubing every according to agency policy (usually between 24-72 hours)
Speed Shock	Pounding headache, rapid pulse rate, anxiety, chills, back pain, dyspnea	Infusing fluid too rapidly into the circulation	Discontinue infusion immediately. Report symptoms to PCP. Monitor VS Prevention: check flow rate often.
Fluid Overload	Dyspnea, engorged neck veins, increased blood pressure	Too large a volume of fluid infused into circulation	Slow the infusion rate; notify PCP; monitor VS Prevention: monitor flow rate and total volume; monitor I/O

Source: ATI Content Mastery Series Fundamentals for Nursing Review Module Ed 5.1

Central venous catheters (CVC)

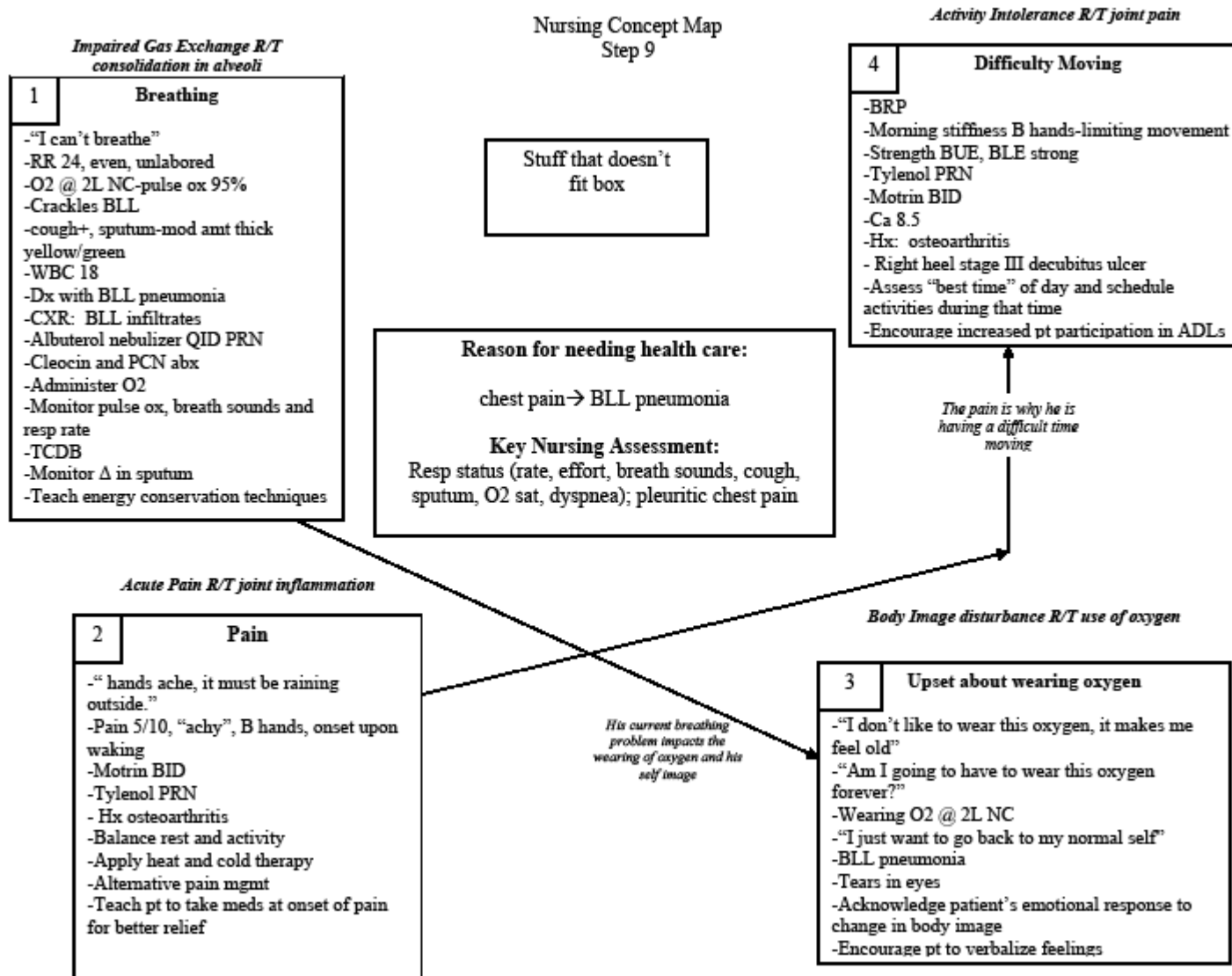
A CVC is inserted into the subclavian or internal jugular veins and terminate in the superior vena cava just above the right atrium. They have a single, double, or triple lumen port. A CVC can be either “short-term” or “long term”.

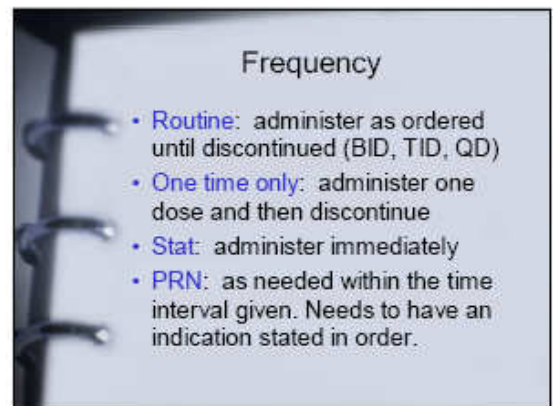
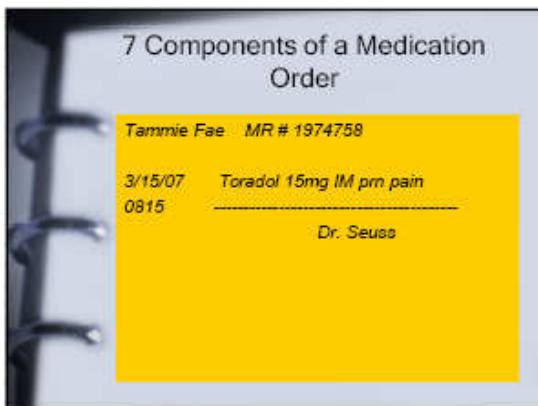
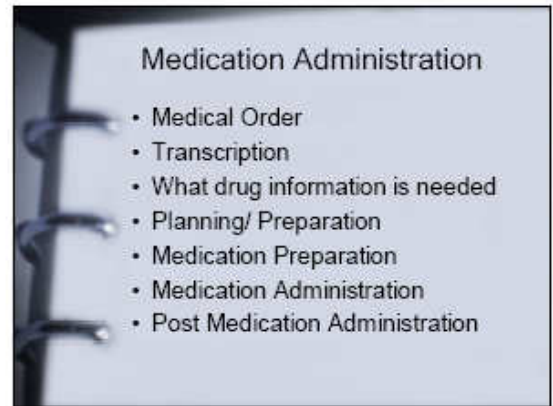
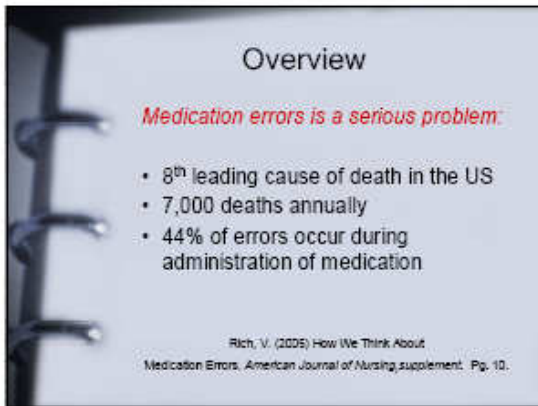
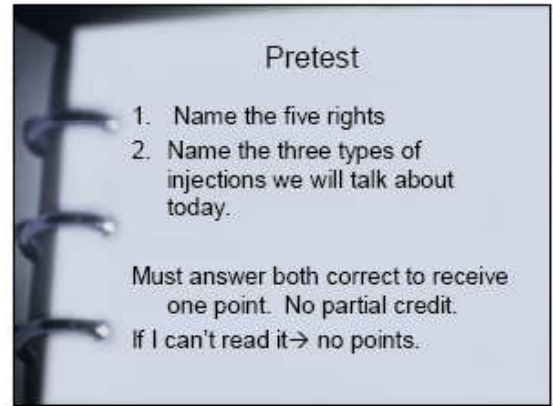
Peripherally inserted central catheters (PICCs)

A PICC is introduced in a peripheral vein and advanced into the superior vena cava. Placement is verified by X-ray. They may be single- or multiple-lumen catheters. PICCs are used for long term (2-6 weeks) antibiotic therapy, parenteral nutrition, chemotherapy, blood components, and long term rehydration.

Source: ATI Content Mastery Series Fundamentals for Nursing Review Module Ed 5.1

Nursing Concept Map
Step 9






Controlled Substances

- Medications that have a high abuse potential. There are laws and regulations to monitor the use of these medications.
 - Locked with limited access.
 - Inventory done by 2 nurses at set intervals.
 - Medication counted before removal and tally kept on separate document.
 - Waste of medications must be **witnessed** and documented by another nurse.

Medication Preparation

- Wash hands
- Assemble the medications in the medication room.
- Remove the meds from the drawer
 - Check for drug expiration date
 - Check for the **five "rights"** against the MAR

**Check drawers at the beginning of your shift in case any medications are missing, you can order them from pharmacy. NEVER "borrow" medications from other patient's supply.



5 "Rights"

- Right **DRUG**
- Right **DOSE**
- Right **ROUTE**
- Right **TIME**
- Right **PATIENT**



5 "Rights"

- Right **DRUG:**
 - Compare drug to MAR three times
 - Taking out of cassette, in med room and at bedside
 - Note expiration date
 - Know indication and nursing considerations

5 "Rights"

- Right **DOSE:**
 - Validate calculations of divided doses with another nurse
 - Check **heparin, insulin and digoxin** with another nurse
 - Know the usual dose and question any dose outside of safe range

5 "Rights"

- Right **ROUTE:**
 - Right route or method of administration
 - If a change in route is needed, request new order from physician
 - Ex: Tylenol 650mg suppository can **not** be changed to PO route without a new order.

5 "Rights"

- **Right TIME:**
 - Medication given 30 minutes before or 30 minutes after time ordered is acceptable.
 - Refer to policy and procedure manual.
 - **Standard administration times are set by each facility.
 - Ex: QD dose 1000
 - BID dose 0900, 2100
- **Know the last time of administration for any PRN drug**

5 "Rights"

- **Right PATIENT:**
 - Identify the patient by asking patient to state name and/or DOB and check armband.
 - Compare name and medical record number on MAR with information on armband.

Miscellaneous "rights"


- **Right Documentation:** document the name of the drug, the dose, route, and time administered. Also document the patient's reaction.
- **Right to Know:** Patients have the right to know about the medication he or she is being given.
- **Right to refuse:** the patient has to the right to refuse treatment, but must be notified of the risks of their actions as well as the doctor should be notified.

Medication Preparation

- Calculate drug dosage **if possible, calculate right before clinical
- Prepare one medication at a time
- Leave medications in packages if possible.
- Use appropriate measuring devices to prepare medications.
- Check 5 "Rights" again before leaving medication room

Medication Administration

- Bring MAR and medications to patient room.
- "IPIE"
- Check 5 "Rights"
 - Compare wristband to MAR
- Ask patient about allergies
- Open packages at patient bedside while performing patient education
 - Ex: "Here is your atenolol 25mg, it is to help control your blood pressure."
- Always tell patient:
 - Name of medication
 - Dosage
 - Indication for use



Administer Medications




Post Administration

- Document on MAR
 - As soon as possible **AFTER** administration
 - Document time administered
 - Initials
 - Make sure signature/initials are in signature section of MAR
- Document client response
 - Narrative note
 - Flowsheet
 - Especially document for PRN medications and first time a new medication is administered

Post Administration


- Document if refused or held
 - Circle time
 - Initial
 - Reason not administered
- Monitor patient for therapeutic effects.



Routes

• Oral	• Nasal
• Enteral	• Otic
• Buccal	• Rectal
• Sublingual	• Vaginal
• Topical	• Intradermal
• Transdermal	• Subcutaneous
• Inhalant	• Intramuscular
• Ophthalmic	• Intravenous

Oral Medications

- **NEVER** crush sustained release, controlled release or enteric coated pills.
- Capsules can not be split 
- More than 3 to = dose
- Place into plastic/paper administration cup without touching the med.
- May use pudding or applesauce for patient's with difficulty swallowing
- Stay with patient until all medications are taken.

Oral Medication Module

- Learning exercise-not testing
- Instruction sheet
- **Complete 2 "patients" by Medication Administration testing day**
 - Identify errors
 - Identify reason patient is taking medication
 - Identify nursing considerations
 - Identify common side effects
- Have Skills lab instructors sign your form once answers are checked

Practice

Furosemide (lasix)

1. Identify any errors between medical order and MAR.
2. Identify why the patient is taking this medication
3. Dosage range
4. Identify nursing considerations
5. Identify common side effects

Look for Errors

<p><u>Physicians Order</u></p> <p>Pt Name Allergies</p> <p>Lasix 20mg PO QD -----Jia Lu, NP-----</p>	<p><u>MAR</u></p> <p>Pt Name Allergies</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="font-size: small;">Medication name, dose, frequency</th> <th style="font-size: small;">Time</th> </tr> </thead> <tbody> <tr> <td>Lasix 2mg PO QD</td> <td>0900</td> </tr> </tbody> </table>	Medication name, dose, frequency	Time	Lasix 2mg PO QD	0900
Medication name, dose, frequency	Time				
Lasix 2mg PO QD	0900				

Lasix


- **Indication:** edema
- **Dosage:** WNL
- **Nursing considerations:** Monitor electrolytes especially check potassium level and s/s hypokalemia, monitor fluid volume status, monitor BP (antihypertensive effects), give in am
- **Side effects:** loss of hearing, Low K, Mg, Cl, Ca, Na, High glucose, uric acid; metabolic alkalosis, increased urine output, glycosuria, skin changes (rash, itch, purpura)

Topical

- Make sure previous dose is removed, before applying new dose.
- Apply patches to nonhairy areas of the body
- Take care not to touch topical medications with ungloved hands

Ophthalmic Applications

- Instruct patient to look toward ceiling
- Make a pouch in the lower lid by pulling skin downward over the bony orbit
- Instill in conjunctival pouch
- Clean/dry from inner to outer canthus



Inhalant Route

- **MDI:** Metered dose inhaler
- **Spacer:** chamber attached to the end of an inhaler that assists the patient in receiving a higher % of drug with each inhalation
- **Nebulizer:** Aerosolized medication either given by a hand held device or by a face mask (peace pipe)
- ****MDI instructions page 545 SDM**

Enteral Tube Administration

- Use liquid form if possible
- Crush pills individually and mix with 15-30 mL of warm water.
- If medication should be given on empty stomach-stop medication for 15-30 minutes before and after med administration
- **√ Placement, Flush with water, administer medication, flush with water, administer medication, flush with water**



Parenteral Medications

- Intradermal
- Subcutaneous
- Intramuscular



Equipment Needed

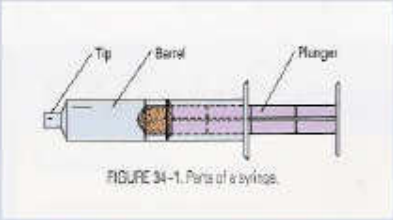



FIGURE 34-1. Parts of a syringe.

Equipment Needed

- Syringes
 - Different sizes (1ml, 3ml, 5ml)
 - Tuberculin syringe
 - Insulin syringe
- Needles
 - Shaft (length of the needle)
 - Gauge (diameter)



Equipment Needed

- Size
 - The smaller the number, the larger the diameter
 - Example: 18 gauge big
 - 25 gauge small
- Safety
 - One handed "Scoop" technique
 - Safety needles

Opening packages

- What needs to stay sterile?
- How do I recap?
- How do I change needles
- Blunt needles?
- Filter needles?
- Safety vs. Nonsafety?

Drug Preparation: Ampoule

- ✓ Tap the top of the ampoule
- ✓ Use gauze or an alcohol swab to protect your fingers.
- ✓ Break the neck of the ampoule **away** from your body.
- ✓ Use a filter needle if available
- ✓ Insert your needle into the solution
- ✓ Invert the ampoule (or leave on surface)
- ✓ With your needle in the solution, pull back on the plunger to the appropriate dose.

Drug Preparation: Ampoule

- ✓ Remove the needle/syringe
- ✓ Tap the barrel of the syringe to remove air.
- ✓ Push the plunger to expel excess air or medication.
- ✓ "Scoop" the cap onto the needle
- ✓ Change the needle
- ✓ Discard the ampoule into a sharps container

Drug Preparation: Vial

- ✓ Remove the metal or plastic protective covering
- ✓ Swab the top with an alcohol swab
- ✓ Fill the syringe with air equivalent to the amount you want to withdraw from the vial.
- ✓ Insert the needle into the center of the rubber stopper.
- ✓ Instill the air from the syringe
- ✓ Invert the vial



Drug Preparation: Vial

- ✓ While holding the vial and the syringe:
 - ✓ Pull back on the plunger to the desired amount.
 - ✓ Make sure the needle tip is in the fluid.
- ✓ Remove the needle/syringe from the vial once the desired amount is reached
- ✓ Use the "scoop" technique to recap the needle.
- ✓ Change the needle before administration



Drug Preparation: Mixed Dose Insulin

- Regular Insulin
 - "clear"
 - Fast acting
 - "pure"
- NPH Insulin
 - "cloudy"
 - Slower acting
 - "contaminated"

Drug Preparation: Mixed Dose Insulin

- ✓ Gather equipment: correct insulin syringe, correct insulin vials (✓ date opened), alcohol swabs, MAR, current fingerstick glucose reading
- ✓ Roll the "cloudy" NPH insulin vial
- ✓ Clean the top of the vials with an alcohol swab.
- ✓ Instill air into the "cloudy" vial equivalent to the "cloudy" dose (NPH) with the vial remaining on the counter surface.
- ✓ Instill air into the "clear" insulin vial equivalent to the "clear" dose (Regular).

Drug Preparation: Mixed Dose Insulin

- ✓ Invert the "clear" vial and withdraw the desired amount.
- ✓ Have this dose checked by another nurse. 📱
- ✓ Insert the needle into the "cloudy" vial and withdraw the desired amount.
- ✓ Again have the total amount checked by another nurse. 📱

Intradermal Administration

- Used for allergy and tuberculin skin testing
- Site: inner forearm (may use back and upper chest)
- Volume: 0.01-0.05 ml
- Equipment: gloves, TB syringe (1ml, 25-27g, 5/8 or 1/2 inch needle), alcohol swab.
- Administration angle: 10-15°

Intradermal Administration

- ✓ Prepare medication
- ✓ Gather supplies
- ✓ Identify site
- ✓ Don gloves
- ✓ Cleanse site with alcohol
- ✓ Pull skin taut
- ✓ Insert needle with bevel up at 10-15 degree angle 1/8 inch.
- ✓ Needle should be visible under skin



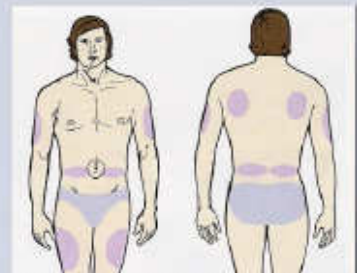
Intradermal Administration

- ✓ Push plunger to instill medication creating a wheal under skin
- ✓ Withdraw needle at same angle inserted.
- ✓ Cover site with gauze for bleeding. **DO NOT massage.**
- ✓ **DO NOT RECAP.** Activate safety feature. Place needle in sharps container uncapped.

Subcutaneous Administration

- Administered into subcutaneous tissue that lies between the skin and the muscle.
- Common subcutaneous injections are **heparin, lovenox and insulin**
- Onset: within a half hour
- Volume: up to 1ml
- Equipment: TB or Insulin syringe (25-27g, 1/2 to 3/4 inch needle), gloves, alcohol swab.
- Administration Angle: 45° or 90 °


Subcutaneous Administration



Adapted from Smith, S.F., Duell, D.J., Martin, S.C. (2004) Clinical Nursing Skills: Basic to Advanced, 9th Ed. Pg. 596. New Jersey: Prentice Hall.

Subcutaneous Administration

- ✓ Prepare medication
- ✓ Gather supplies
- ✓ Identify site
- ✓ Don gloves
- ✓ Cleanse site with alcohol
- ✓ Bunch the skin
- ✓ Hold needle like "dart"




Subcutaneous Administration

- ✓ Pierce skin with quick motion at 45-90 degree angle.
- ✓ **DO NOT ASPIRATE.**
- ✓ Inject medication slowly
- ✓ Quickly remove needle
- ✓ **DO NOT RECAP.** Activate safety feature. Place needle in sharps container uncapped.

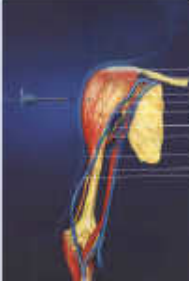
Intramuscular Administration

- Administered into a muscle or muscle group
- **Onset:** variable
- **Volume:** up to 4ml
- **Equipment:** gloves, 1-5 ml syringe, needle (18-23 g, 1/2 to 3 inch needle), alcohol swab
- **RN is responsible to chose needle size and gauge.**
- **Administration angle:** 90°

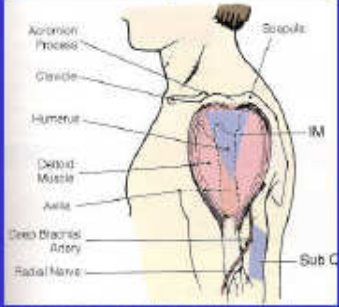


Intramuscular Administration Deltoid

- Palpate lower edge of acromion process.
- Place 4 fingers across the deltoid muscle with the top finger along the acromion process. This forms the base of a triangle.
- Draw an imaginary line at the axilla. This forms the apex of the triangle.
- Injection site is the center of the triangle, 3 finger widths (1-2 inches) below the acromion process.



Deltoid Injection Site




Acromion Process, Scapula, Clavicle, Humerus, Deltoid Muscle, Axilla, Deep Brachial Artery, Radial Nerve, IM, Sub C

Adapted from: Smith, S.P., Dean, D.J., & Merrill, S.C. (2009). Clinical Nursing (4th Edition). Philadelphia: P. 612, Fig. 36.7. New Jersey: Prentice Hall.


Intramuscular Administration Vastus Lateralis

- One hand above the knee.
- One hand below the greater trochanter.
- Locate midline of anterior thigh and midline of lateral thigh.
- Injection site is the lateral area of the thigh



Intramuscular Administration Ventral Gluteal

- Palm of hand on greater trochanter of femur.
- Index finger on anterior superior iliac spine (hip bone).
- Middle finger extended toward iliac tubercle.
- Injection site lies within the triangle formed by the index and middle fingers



Intramuscular Administration Dorsal Gluteal

- Locate the posterior iliac spine.
- Locate the greater trochanter.
- Draw an imaginary line between these two landmarks.
- Injection site is above and lateral to the line.
- **Most dangerous site because of sciatic nerve location**



Intramuscular Administration


- ✓ Prepare medication
- ✓ Gather supplies
- ✓ Identify site
- ✓ Don gloves
- ✓ Cleanse site with alcohol
- ✓ Pull skin taut
- ✓ Hold needle like "dart"
- ✓ Insert quickly at a 90° angle

Intramuscular Administration

- ✓ Stabilize needle
- ✓ **Aspirate for blood**
- ✓ If no blood, instill medication slow and steady
- ✓ Quickly remove needle.
- ✓ **DO NOT RECAP.** Activate safety feature. Place needle in sharps container uncapped.
- ✓ Massage site with alcohol swab
- ✓ Remove gloves


Z-track IM Administration

- Method used with irritating medications
 - Vistaril
 - Iron
- Used to "trap" medication in muscle and prevent "tracking" of solution through tissues.



Z-track IM Administration

- ✓ Prepare medication
 - ✓ Change needle after drawing up med
- ✓ Gather supplies
- ✓ Identify site
- ✓ Don gloves
- ✓ Cleanse site with alcohol
- ✓ Displace skin laterally 1-1 ½ inches from injection site
- ✓ While holding skin, insert needle with a darting motion, at a 90° angle.



Z-track IM Administration

- ✓ Stabilize needle with thumb and forefinger.
- ✓ **Aspirate.**
- ✓ If no blood, then inject medication slowly and steady
- ✓ Wait 10 seconds
- ✓ Quickly withdrawal needle
- ✓ Then release skin
- ✓ Cover site with swab and **DO NOT MASSAGE**
- ✓ **DO NOT RECAP.** Activate safety feature. Place needle in sharps container uncapped
- ✓ Remove gloves

Methods to Decrease the Pain of Injections

- Encourage client relaxation-position client to have muscle relaxed
 - Position prone with feet inverted for dorsogluteal injection
- Change needle after preparing medication in syringe
- Avoid injecting into sensitive or hardened skin
- Use needle long enough to reach muscle
- "Dart" needle quickly into muscle
- Use smallest gauge possible

Methods to Decrease the Pain of Injections

- Inject medication slowly
- Do not move needle once inserted
- Withdraw needle quickly
- Use Z-track for IM injections
- EMLA cream may be applied
- Apply pressure/ice to site before injection.

References

- Smith, S.F., Duell, D.J., Martin, B.C. (2004) *Clinical Nursing Skills, Basic to Advanced, 6th Ed.* New Jersey: Prentice Hill
- Timby, B.K. (2003) *Fundamental Skills and Concepts in Patient Care, 7th Ed.* Philadelphia: Lippincott