



NUR 1519

Transfer Packet

Dear Transfer Student,

Thank you for your interest in our nursing program. Please ensure that you have met all documentation requirements required by the Nursing Program Director BEFORE seeking and/or scheduling any exams through the Nursing Campus Laboratory. All testing (including retesting) must be completed on or before the designated deadline.

This packet was developed to assist in preparing for the various testing that you will need to complete prior to entry into our program. All students seeking to transfer/readmit will be required to purchase a lab kit prior to attending any faculty demonstration(s), independent practice or scheduled student demonstrations. Proof of purchase will be required. Hard copies of this packet may be obtained from the Nursing and Simulation Lab Coordinator office during regular lab hours.

You will be tested over the following:

- Dosage calculation (see section on Math Competency):
 - 20 item exam, to include medication labels
 - students will be given four (4) attempts to attain a 95% competency (different exams will be administered)
 - testing will be administered through the OCCC Test Center at your convenience during regular hours of operation. You will need a photo ID to access the Test Center

- Theory (see Theory and Campus Lab Learning Objectives section):
 - five (5) questions per content area, to include associated/related campus laboratory content (exception: Nursing Process and Teaching/Learning as these will be included/threaded in the test items)
 - students will have one (1) attempt to achieve a minimum score of 74%
 - examination dates will be posted on the Nursing Campus Laboratory webpage calendar
 - students will self-schedule their preferred examination date

- Psychomotor Skills (see section on Skills Demonstration):
 - students will be evaluated on:
 - parenteral medication administration
 - physical assessment skills
 - one of three identified sterile skills
 - students will have two (2) opportunities to demonstrate proficiency; second attempts will be videotaped and evaluated by two additional faculty members

If you have any questions, please do not hesitate to contact me.

Sincerely,

Cindy

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Theory and Campus Laboratory Learning Objectives

NUR1519 Theory Objectives

Legal and Ethical Guidelines for Nursing Practice

- 1 Identify sources of law and types of laws that affect nursing practice.
- 2 Demonstrate an understanding of the nurse's legal responsibility for providing safe, quality, client-centered care.
- 3 Discuss the legal responsibilities of the nursing student.
- 4 Relate professional and legal regulation of the nursing profession.
- 5 Relate areas of potential liability for the nurse.
- 6 Describe legal safeguards and strategies that protect the nurse from litigation.
- 7 Discuss common ethical dilemmas that health care professionals may encounter and their impact on decision making.
- 8 Discuss the nurse's role as advocate for the client.
- 9 Discuss the legal implications relating to the use of informatics in health care setting.

Communication in Nursing Practice

- 1 Define the concept of communication.
- 2 Discuss the various levels of communication.
- 3 Discuss the differences between verbal and nonverbal communication.
- 4 Discuss barriers for effective communication.
- 5 Explain the concept of therapeutic communication.
- 6 Illustrate how various factors influence therapeutic communication.
- 7 Discuss techniques that promote therapeutic communication.
- 8 Review principles of professional communication.

Diversity

- 1 Examine the concept of diversity to include culture, ethnicity, social background, life style choices and spirituality when providing safe, quality client-centered care.
- 2 Determine cultural influences and barriers on client-centered care
- 3 Discuss legal and ethical nursing responsibilities when caring for the diverse client.
- 4 Apply therapeutic communication techniques to the care of the diverse client.
- 5 Compare and contrast the delivery of nursing and medical care between countries in North America with those of another continent.* Meets Global Awareness Requirement

Developmental and Age-Related Changes

- 1 Discuss principles of developmental and age-related changes across the life span.
- 2 Discuss factors that influence developmental and age-related changes across the life span.
- 3 Demonstrate an understanding of Erickson's stages of human development and Piaget's cognitive theory of development.
- 4 Identify common health problems for each of the developmental stages.
- 5 Identify age-appropriate assessment techniques.
- 6 Demonstrate an understanding of factors that affect client safety in each developmental stage.
- 7 Discuss the special needs of the aging client to include community resources.

Nursing Process and Clinical Reasoning

- 1 Identify the overall purposes of the nursing process to guide and direct the practice of safe, quality nursing care.
- 2 Relate the concepts of critical thinking and clinical reasoning to nursing process knowledge and skills.
- 3 Identify the components of the nursing process.
- 4 Discuss the importance of assessment data in the development of a client-centered plan of care.
- 5 Establish and prioritize a nursing diagnosis based upon assessment data.
- 6 Determine expected outcomes based upon the nursing diagnosis.
- 7 Develop and implement client-centered interventions (to include caring interventions) to meet expected outcomes.
- 8 Evaluate the effectiveness of the plan of care in meeting the expected outcomes.
- 9 Relate the use of evidence based practice to the nursing process and the provision of safe, quality, client-centered care.
- 10 Relate the importance of active involvement of the client, family, or significant other in the development of the client's plan of care.
- 11 Discuss how diversity influences the client's plan of care.

Teaching and Learning

- 1 Apply learning domains to client teaching and learning.
- 2 Determine factors affecting client learning.
- 3 Develop a client-centered plan of care that utilizes the nursing process and the knowledge of teaching learning principles
- 4 Implement the use of evidence based practice in client teaching in the provision of safe, quality, client-centered care.
- 5 Discuss the importance of documentation to the teaching/learning process.

Documentation

- 1 Apply guidelines and approved abbreviations/symbols used in documentation.
- 2 Discuss the importance of timely, accurate documentation in healthcare.
- 3 Identify various documentation systems, including electronic health records.
- 4 Describe the purpose of the client record.
- 5 Discuss legal aspects of documenting client care.
- 6 Apply the principles and essential information in the documentation of client care.

Health Promotion and Maintenance Responsibilities in Nursing Practice

- 1 Discuss wellness, health promotion, health protection and levels of prevention.
- 2 Discuss individual factors that influence a client's position on the wellness-illness continuum.
- 3 Differentiate between the healthy client and those experience alterations in health.
- 4 Explain the nurse's role in maintaining and promoting health.
- 5 Discuss the use of evidence based practice in health promotion and the provision of safe, quality, client-centered care.
- 6 Relate the influence of Healthy People 2020 on safe, quality, client-centered care.

Principles of Medication Administration in Nursing Practice

- 1 Discuss the implications of pharmacokinetics and pharmacodynamics in the delivery of safe, quality client-centered care.
- 2 Examine the principles of drug administration.
- 3 Discuss routes of medication administration to include advantages, disadvantages and nursing considerations.
- 4 Examine the role of standards of care and national safety initiatives relating to the administration of medication.
- 5 Recognize the legal and ethical nursing responsibilities as they relate to the administration of medication.
- 6 Examine potential hazards of medication administration and strategies to prevent errors.
- 7 Develop a client-centered plan of care that utilizes the nursing process related to the administration of medications.
- 8 Discuss client teaching needs as they relate to the administration of medication.

Promoting Pain Management and Comfort

- 1 Differentiate between the different types of pain.
- 2 Determine factors that affect clients experiencing pain.
- 3 Describe and demonstrate a comprehensive pain assessment.
- 4 Compare and contrast pharmacological pain relief measures.
- 5 Compare and contrast non-pharmacological pain relief measures.
- 6 Develop a client-centered plan, emphasizing safety and evidence based practice, for the clients with or at risk for pain.
- 7 Discuss how age and/or diversity impact the client's response to pain and the plan of care.
- 8 Discuss health promotion and maintenance activities for clients with or at risk for pain.
- 9 Discuss legal and ethical nursing responsibilities when providing client-centered care for the client with or at risk for pain.
- 10 Relate teaching needs for the client with or at risk for pain.

Promoting Rest and Sleep

- 1 Discuss the human need for rest and sleep.
- 2 Determine factors that affect sleep.
- 3 Discuss common sleep disorders: sleep apnea, insomnia, sleep disturbances.
- 4 Describe and demonstrate a comprehensive sleep assessment.
- 5 Develop a client-centered plan, emphasizing safety and evidence based practice, for the clients with or at risk for the problems with sleep.
- 6 Discuss how age and/or diversity impact the client's response to sleep problems and the plan of care.
- 7 Discuss health promotion and maintenance activities for clients with or at risk for sleep problems.
- 8 Discuss legal and ethical nursing responsibilities when providing client-centered care for the client with or at risk for sleep problems.
- 9 Relate teaching needs for the client with or at risk for sleep problems.

Fluids and Electrolyte Balance

- 1 Review physiologic processes and body mechanisms used to maintain fluid and electrolyte balance within the body. (online activity)
- 2 Describe the location and function of major electrolytes within the body.
- 3 Identify factors that affect normal fluid and electrolyte balance.

- 4 Differentiate between isotonic, hypertonic, and hypotonic fluids.
- 5 Identify basic diagnostic testing related fluid and electrolyte balance.
- 6 Describe and demonstrate a comprehensive fluid and electrolyte assessment.
- 7 Develop a client-centered plan, emphasizing safety and evidence based practice, for the clients with or at risk for fluid volume imbalance.
- 8 Discuss how age and/or diversity impact the client's response to fluid volume imbalance and the plan of care.
- 9 Discuss health promotion and maintenance activities for clients with or at risk for fluid volume imbalance.
- 10 Discuss legal and ethical nursing responsibilities when providing client-centered care for the client with or at risk for fluid volume imbalance.
- 11 Relate teaching needs for the client with or at risk for fluid volume imbalance.

Oxygenation

- 1 Review the anatomy and physiological process of the respiratory system. (online activity)
- 2 Discuss the principles of respiratory physiology and oxygenation.
- 3 Discuss factors that influence oxygenation.
- 4 Discuss common problems affecting alterations in oxygenation: hypoxemia, hypoxia, hypercapnia, airway obstruction, altered breathing patterns.
- 5 Describe and demonstrate a comprehensive respiratory assessment.
- 6 Interpret basic diagnostic testing related to oxygenation.
- 7 Develop a client-centered plan, emphasizing safety and evidence based practice, for the clients with or at risk for oxygenation problems.
- 8 Discuss how age and/or diversity impact the client's response to oxygenation problems and the plan of care.
- 9 Discuss health promotion and maintenance activities for clients with or at risk for oxygenation problems.
- 10 Discuss legal and ethical nursing responsibilities when providing client-centered care for the client with or at risk for oxygenation problems.
- 11 Relate teaching needs for the client with or at risk for oxygenation problems.

Activity and Mobility

- 1 Review the anatomy and physiological process of the musculoskeletal system. (online activity)
- 2 Discuss factors that influence activity and mobility.
- 3 Discuss common problems affecting alterations in activity and mobility: osteoporosis, scoliosis, osteoarthritis.
- 4 Describe and demonstrate a comprehensive activity and mobility assessment.
- 5 Develop a client-centered plan, emphasizing safety and evidence based practice, for the clients with or at risk for activity and mobility problems.
- 6 Discuss how age and/or diversity impact the client's response to activity and mobility problems and the plan of care.
- 7 Discuss health promotion and maintenance activities for clients with or at risk for activity and mobility problems.
- 8 Discuss legal and ethical nursing responsibilities when providing client-centered care for the client with or at risk for activity and mobility problems.
- 9 Relate teaching needs for the client with or at risk for activity and mobility problems.

Circulation

- 1 Review the anatomy and physiological process of the circulatory system. (online activity)
- 2 Discuss factors that affect circulation.
- 3 Discuss common problems affecting alterations in circulatory function: pre-hypertension, atherosclerotic changes, venous stasis, ischemia.

- 4 Describe and demonstrate a basic circulatory assessment.
- 5 Interpret basic diagnostic testing related to circulation.
- 6 Develop a client-centered plan, emphasizing safety and evidence based practice, for the clients with or at risk for circulation problems.
- 7 Discuss how age and/or diversity impact the client's response to circulation problems and the plan of care.
- 8 Discuss health promotion and maintenance activities for clients with or at risk for circulation problems.
- 9 Discuss legal and ethical nursing responsibilities when providing client-centered care for the client with or at risk for circulation problems.
- 10 Relate teaching needs for the client with or at risk for circulation problems.

Metabolic Function

- 1 Review the anatomy and physiological process of the gastrointestinal system. (online activity)
- 2 Discuss energy balance; to include metabolic requirements, body weight standards and caloric requirements.
- 3 Determine factors that affect nutrition.
- 4 Discuss clients at risk for complications associated with altered nutrition.
- 5 Describe and demonstrate a nutritional assessment.
- 6 Differentiate causes and interventions for hyper-hypoglycemia.
- 7 Interpret basic diagnostic testing related to nutrition.
- 8 Discuss and identify normal and modified diets.
- 9 Develop a client-centered plan, emphasizing safety and evidence based practice, for the clients with or at risk for nutritional problems.
- 10 Discuss how age and/or diversity impact the client's response to nutritional problems and the plan of care.
- 11 Discuss health promotion and maintenance activities for clients with or at risk for nutritional problems.
- 12 Discuss legal and ethical nursing responsibilities when providing client-centered care for the client with or at risk for nutritional problems.
- 13 Relate teaching needs for the client with or at risk for nutritional problems.

Sensory Functions

- 1 Review the anatomy and physiological process associated with sensory function. (online activity)
- 2 Determine factors that affect sensory function.
- 3 Describe and demonstrate a basic sensory assessment.
- 4 Develop a client-centered plan, emphasizing safety and evidence based practice, for the clients with or at risk for sensory problems.
- 5 Discuss how age and/or diversity impact the client's response to sensory problems and the plan of care.
- 6 Discuss health promotion and maintenance activities for clients with or at risk for sensory problems.
- 7 Discuss legal and ethical nursing responsibilities when providing client-centered care for the client with or at risk for sensory problems.
- 8 Relate teaching needs for the client with or at risk for sensory problems.

Urinary Elimination

- 1 Review the anatomy and physiological process associated with genitourinary function. (online activity)
- 2 Determine factors that affect urinary elimination.
- 3 Describe and demonstrate a basic genitourinary assessment.
- 4 Discuss common health problems related to urinary elimination: cystitis, dysuria, hematuria, urinary incontinence, urinary retention.
- 5 Interpret basic diagnostic testing relating to urinary elimination.

- 6 Develop a client-centered plan, emphasizing safety and evidence based practice, for the clients with or at risk for urinary problems.
- 7 Discuss how age and/or diversity impact the client's response to urinary problems and the plan of care.
- 8 Discuss health promotion and maintenance activities for clients with or at risk for urinary problems.
- 9 Discuss legal and ethical nursing responsibilities when providing client-centered care for the client with or at risk for urinary problems.
- 10 Relate teaching needs for the client with or at risk for urinary problems.

Bowel Elimination

- 1 Review the anatomy and physiological process associated with gastrointestinal function. (online activity)
- 2 Determine factors that affect bowel elimination.
- 3 Discuss common health problems related to bowel function: constipation, fecal impaction, diarrhea, bowel incontinence, gastroenteritis
- 4 Describe and demonstrate a bowel assessment.
- 5 Interpret basic diagnostic testing relating to bowel elimination.
- 6 Develop a client-centered plan, emphasizing safety and evidence based practice, for the clients with or at risk for bowel problems.
- 7 Discuss how age and/or diversity impact the client's response to bowel problems and the plan of care.
- 8 Discuss health promotion and maintenance activities for clients with or at risk for bowel problems.
- 9 Discuss legal and ethical nursing responsibilities when providing client-centered care for the client with or at risk for bowel problems.
- 10 Relate teaching needs for the client with or at risk for bowel problems.

Tissue Integrity

- 1 Review the anatomy and physiological process associated with the integumentary system. (online activity)
- 2 Determine factors that affect tissue integrity.
- 3 Describe and demonstrate an integumentary and wound assessment.
- 4 Discuss common health problems related to tissue integrity: pressure ulcers, cellulitis, contact dermatitis, and wounds.
- 5 Develop a client-centered plan, emphasizing safety and evidence based practice, for the clients with or at risk for tissue integrity problems.
- 6 Discuss how age and/or diversity impact the client's response to tissue integrity problems and the plan of care.
- 7 Discuss health promotion and maintenance activities for clients with or at risk for tissue integrity problems.
- 8 Discuss legal and ethical nursing responsibilities when providing client-centered care for the client with or at risk for tissue integrity problems.
- 9 Relate teaching needs for the client with or at risk for tissue integrity problems.

Promoting Healthy Responses to Grief, Loss, and Death Learning

- 1 Differentiate between dying, death, grief and loss.
- 2 Compare and contrast models of grief.
- 3 Determine factors that affect grieving and altered grieving.
- 4 Develop a client-centered plan, emphasizing safety and evidence based practice, for the dying client and the client experiencing grief and loss.
- 5 Discuss how age and/or diversity impact the dying client and the client experiencing grief and loss and the plan of care.

- 6 Discuss legal and ethical nursing responsibilities when providing client-centered care for the dying client and the client experiencing grief and loss.

NUR 1519 Campus Lab Objectives

Lab and Simulator Orientation, VS, BM and Client Transfers

- 1 Identify and demonstrate appropriate techniques and nursing responsibilities for assessing temperature, pulse, respirations and blood pressure.
- 2 Identify age-related variations in the normal ranges for temperature, pulse, respirations, and blood pressure.
- 3 Demonstrate the normal movements utilized in passive range-of-motion exercises.
- 4 Demonstrate appropriate body mechanics as they relate to positioning, transferring, lifting, and ambulating clients with and without assistive devices.
- 5 Identify nursing responsibilities in maintaining safety for clients experiencing problems with activity and mobility.
- 6 Demonstrate correct use of various assistive devices for positioning, transferring, lifting and ambulating clients.

Basic Clinical Skills, Aseptic Technique, PPE and Hand Hygiene

- 1 Demonstrate correct technique for the measuring and application of TED and SCD appliances.
- 2 Examine factors affecting personal hygiene, hygiene practices and comfort to include developmental and cultural consideration.
- 3 Demonstrate techniques used when assisting clients with hygiene measures and providing for a clean and safe environment.
- 4 Demonstrate making an occupied and an unoccupied bed.
- 5 Examine strategies for implementing CDC guidelines for standard and transmission based precautions in the clinical setting.
- 6 Demonstrate appropriate hand hygiene measures and use of commercial hand hygiene products.
- 7 Demonstrate the psychomotor skills of applying and removing personal protective equipment.
- 8 Demonstrate the correct procedure for removing items from a isolation room.
- 9 Discuss the principles of medical asepsis when providing care for the client.
- 10 Identify nursing responsibilities in establishing and maintaining a sterile field.
- 11 Demonstrate establishing and maintaining a sterile field.
- 12 Demonstrate the psychomotor skill of donning and removing sterile gloves.

Nursing Physical Assessment and Nursing Program Forms (Clinical Information Session)

- 1 Identify age appropriate techniques and equipment used for the examination of clients.
- 2 Identify the components of the general survey.
- 3 Discuss expected findings of a physical assessment.
- 4 Distinguish basic subjective and objective data to be obtained before, during and after the assessment.
- 5 Demonstrate physical assessment using the head to toe method.
- 6 Demonstrate accurate documentation of assessment findings.

Non-parenteral Medication Administration and Parenteral Medication Administration: An Introduction

- 1 Demonstrate accuracy in drug dosage calculations.
- 2 Administer non-parenteral medications to standardized clients in the practice lab setting.
- 3 Demonstrate accurate documentation and necessary client education when administering non-parenteral medications.
- 4 Identify principles required for the safe administration by non-parenteral and parenteral routes.
- 5 Examine potential hazards of medication administration and strategies to prevent errors.
- 6 Determine basic subjective and objective data to be collected prior to medication administration.
- 7 Demonstrate the psychomotor skills necessary to correctly prepare and administer non-parenteral and parenteral medications.

Feeding the Client, Special Diets and Precautions, Fingersticks, Nutritional Assessment & Lab Values

- 1 Determine care and complications associated with enteral nutrition.
- 2 Demonstrate the psychomotor skills necessary in assessing residual and administration of enteral feedings.
- 3 Demonstrate correct techniques when feeding a client.
- 4 Demonstrate accurate documentation of intake.
- 5 Discuss and demonstrate a comprehensive nutritional assessment.
- 6 Discuss swallowing precautions and methods used to prevent aspiration in the high risk client.
- 7 Interpret basic diagnostic testing related to nutrition.

Suctioning, Oxygenation Equipment and System Assessment (Respiratory)

- 1 Identify nursing responsibilities when caring for the client requiring airway management.
- 2 Demonstrate understanding of age appropriate techniques and equipment used when performing nasopharyngeal and oropharyngeal suctioning.
- 3 Distinguish between the various oxygen delivery systems to include the rationale and contraindications for each.
- 4 Demonstrate the psychomotor skills necessary for the correct application of various oxygen delivery systems and transport of the client with a portable oxygen device.
- 5 Demonstrate the proper application of a pulse oximetry to include the setting of alarms, troubleshooting, and documentation of SpO₂.
- 6 Discuss methods and proper techniques for collecting sputum specimens (expectorated).
- 7 Demonstrate a focused respiratory assessment.
- 8 Utilize appropriate safety precautions based on client's situation.
- 9 Demonstrate accurate documentation of assessment findings.

System Assessment (Circulation and Musculoskeletal) and Open Skills Lab Practice

- 1 Demonstrate understanding of age appropriate techniques and equipment used to perform a basic focused circulatory assessment.
- 2 Demonstrate understanding of age appropriate techniques and equipment used to perform a basic focused musculoskeletal assessment.
- 3 Utilize appropriate safety precautions based on client's situation.
- 4 Demonstrate a basic focused circulatory assessment.
- 5 Demonstrate a basic focused musculoskeletal assessment.
- 6 Demonstrate accurate documentation of assessment findings.

Neurological, Sensory, and HEENT Assessment

- 1 Demonstrate understanding of age appropriate techniques and equipment used to perform a basic focused sensory, HEENT, and neurological assessment.
- 2 Utilize appropriate safety precautions based on clients situation.
- 3 Demonstrate a basic focused sensory, HEENT, and neurological assessment.
- 4 Demonstrate accurate documentation of assessment findings.

Urinary Catheterization, Specimen Collection and Bowel Care and System Assessment (Genitourinary and Abdomen)

- 1 Demonstrate understanding of age appropriate techniques and equipment used to perform a focused genitourinary assessment.
- 2 Demonstrate understanding of age appropriate techniques and equipment used to perform a focused abdominal assessment.
- 3 Utilize appropriate safety precautions based on clients situation.
- 4 Demonstrate a focused genitourinary assessment.
- 5 Demonstrate a focused abdominal assessment.
- 6 Demonstrate accurate documentation of assessment findings.
- 7 Demonstrate sterile technique when catheterizing male and female clients (straight and indwelling).
- 8 Discuss methods utilized for collecting urine and stool specimens.
- 9 Demonstrate the psychomotor skills necessary to obtain a capillary blood glucose specimen.
- 10 Identify methods to determine specific gravity and abnormal constituents in the urine.
- 11 Demonstrate proper technique in the administration of various types of enemas.
- 12 Demonstrate methods for assisting clients with toileting.
- 13 Discuss methods for evaluating post void residuals.
- 14 Demonstrate the application of a condom catheter.
- 15 Demonstrate accurate documentation of assessment findings.

Wound Management and System Assessment (Skin and Breast/Axillae)

- 1 Determine nursing interventions utilized in the prevention, identification and care of pressure ulcers.
- 2 Demonstrate the procedure for collecting a culture from a wound.
- 3 Utilize Braden risk assessment scale and the Norton skin assessment tool to determine a clients risk for the development of skin breakdown.
- 4 Demonstrate understanding of age appropriate techniques and equipment used to perform a focused integumentary assessment.
- 5 Utilize appropriate safety precautions based on clients situation
- 6 Demonstrate a focused integumentary assessment.
- 7 Demonstrate the psychomotor skills necessary to manage various client wounds and drains.
- 8 Demonstrate a focused breast/axillae assessment
- 9 Demonstrate accurate documentation of assessment findings.

On the day of the skills demonstration:

1. Report to campus lab promptly on your scheduled day and time. Do not enter the lab until the faculty has directed you to do so. **NOTE:** *Students arriving late for their scheduled time will be sent home and will forfeit their first attempt to complete the assigned skill.*
2. Students are to come dressed in appropriate attire for the nursing campus laboratory (e.g. scrubs, closed toe shoes). Hair must be securely arranged out of your face. **NOTE:** *Students not dressed appropriately will be sent home and will forfeit their first attempt to complete the assigned skills.*
3. Leave all personal belongings at home. Personal items will not be allowed in the lab area during the final skills demonstration.
4. No food or drinks will be allowed in the lab.
5. Students will have 40 minutes to complete all skills.
6. You are expected to come prepared! Faculty will not be assisting you during the evaluation. (e.g. provide cues or answering positively/negatively to inquiries if the skill(s) are being done correctly)

Instructions for Final Skills Demonstration

1. All re-demonstrations of skills will be scheduled one week from the original skills demonstration date but not later than the deadline set forth for entry into the program.
2. The re-demonstration will be videotaped and reviewed by two additional faculty members.
3. Students requiring a second evaluation are strongly encouraged to utilize all available resources prior to the second demonstration.
4. Appointments for re-demonstration of skills will be scheduled by the student, utilizing the Nursing Campus Laboratory webpage calendar.
5. Students will have a maximum of two (2) attempts to successfully demonstrate assigned skills.
6. Students will re-demonstrate the skill set in its entirety when retesting. Errors in performance not related to the first demonstration of the skill may be cause for failure during the re-demonstration.
7. Students may or may not re-demonstrate the same skill/skill set during the re-demonstration. On the day of re-demonstration, students will draw the skill they will perform.

The skills to be covered/demonstrated are as follows:

- Parenteral Medication Administration: Preparation and administration of parenteral medications * Bring your designated supplies ** sites will be chosen for you (SC, ID, IM). Client may be an adult, child or infant.

All students will demonstrate administration of parenteral medications. Please note the requirements include that the student be able to successfully complete all of the below:

- a) demonstrate mixing insulin, choosing appropriate equipment, intramuscular injection, administering a SC injection, etc.
- b) demonstrate how to administer a medication using the Z-track method
- c) correctly calculate dosage from the written order
- d) correctly draw up medications from a variety of containers
- e) correctly locate the designated site (faculty will designate) by correctly identifying all associated anatomical landmarks and correctly naming the muscle(s) to be injected into
- f) safely performing the injection procedure
- g) correctly disposing of all supplies

- Sterile Skill(s): Students must be prepared to do one of the following skills. Students will “draw” the sterile skill they are to perform on the day of the final skills demonstration.

All students will demonstration preparation of a sterile field, sterile gloving AND

- a) changing a dry, sterile dressing **Bring your unopened sterile dressing tray OR*
- b) nasopharyngeal and oropharyngeal suctioning ** Bring your unopened suction kit OR*
- c) catheterization of the male and/or female urinary bladder (straight cath or indwelling cath will be performed) **Bring your unopened straight cath kit; if you draw an indwelling cath, a kit will be provided for you*

Instructions for Practice of Skills

- The Nursing Campus Lab #3 is available for students seeking transfer into our nursing program(s) for independent “practice” and supervised practice (as scheduled). Campus lab hours are posted on the Nursing Campus Lab webpage.
- The Nursing Lab Coordinator will post available times for faculty demonstration of each skill to the Nursing Campus Laboratory webpage/calendar. Faculty appointments may also be scheduled as necessary per availability of appointment times as posted. Recording of the skills demonstrations is prohibited.
- Faculty appointments and testing appointments are scheduled by the student through the Nursing Campus Laboratory calendar.

Important: You will need to bring your lab kit for practice; however, please keep all previously designated equipment for the final skills demonstration SEPARATE from your practice materials/supplies (this information is given out at the beginning of the semester)

When practicing:

- ✓ Review each procedure as outlined in procedural checklist and your current fundamentals textbook.
- ✓ Checklists for our adopted fundamentals textbook are available through the hyperlinks provided in this packet – however, they are a condensed listing of steps and are only to be used as a quick reference! Students are responsible for all steps to safely and correctly perform each skill. You will be held responsible for the required to maintain client and personal safety. Read each checklist carefully after you have attained them. You will be required to perform each skill in a similar manner. Minor variations from the procedures will be allowed if the safeties of the client and the nurse have not been compromised. In addition, if you make an error during the evaluation you are encouraged to identify the error and any corrective action *at the point in which the error was committed*. This may prevent you from having to return for a second evaluation session. *However, repeated errors with or without correction by the student is cause for failure! Self-corrections AFTER the point in which the error was committed will not be accepted.*
- ✓ Additionally, students may be asked to provide rationales for the step/procedure they are doing during the skills demonstration. Be prepared to explain rationales.
- ✓ Utilize any assistance that the lab faculty or student instructor can provide (as available)!
- ✓ Consider videotaping yourself performing the skill.
- ✓ Look at your textbook FREQUENTLY for steps.
- ✓ Practice, practice, practice!



Procedural Skills Checklists for Skills to be Evaluated in NUR1519

Medication Guidelines/Steps to follow for all Medications (Regardless of Type or Route)

Instructions: This skills checklist will be utilized with all skills requiring the student to prepare and/or administer medications (all routes).

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. <i>First Check:</i> Checks medication order on MAR against physician's order (patient name, identification number, medication, dose, route, time, and allergies).						
2. Follows agency policies for medication administration, including the time frame for medication administration. Most agencies allow medications to be given 30 minutes before or 30 minutes after the time indicated in the MAR.	<i>Not applicable for final skills demonstration.</i>					
3. Knows drug information, including drug action, purpose, recommended dosage, time of onset and peak action, common side effects, contraindications, drug interactions, and nursing implications.	<i>Not applicable for final skills demonstration.</i>					
4. Determines if medication dosage is appropriate for patient's age and weight.	<i>Not applicable for final skills demonstration.</i>					
5. Identifies any special considerations for medication preparation and administration, such as can the medication be crushed or a capsule opened, or should medication be administered with food or on an empty stomach.	<i>Not applicable for final skills demonstration.</i>					
6. Checks expiration date of medication.						
7. <i>Second Check:</i> When preparing medication, verifies correct medication, dose, time, route, and expiration date.						
8. Calculates dosage accurately.						
9. Locks medication cart after removing medication.	<i>Not applicable for final skills demonstration.</i>					
10. <i>Third Check:</i> At the bedside, verifies correct patient (using two methods of identification, including armband), medication, expiration date, dose, route, time, and presence of drug allergies.						
11. Remains with the patient until sure he has taken the medication.	<i>Not applicable for final skills demonstration.</i>					
12. Does not leave medication unattended at bedside.	<i>Not applicable for final skills demonstration.</i>					

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
13. Reassesses for therapeutic and side effects.						
14. Teaches patient about the medication as needed.	<i>Not applicable for final skills demonstration.</i>					
Grade for Skill					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Preparing Vials

Instructions: This skills checklist will be utilized with all skills requiring the student to prepare and/or administer medications that are available in a vial.

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. Prepares and administers medications according to "Medication Guidelines: Steps to Follow for All Medications."						
2. Maintains sterility during all steps.						
3. Recaps needles throughout, using a needle capping device or approved one-handed technique that has a low risk of contaminating the sterile needle (see Procedure Checklist: Recapping Needles Using One-Handed Technique).						
4. Mixes solution in vial, if needed, by gently rolling between hands.						
5. If using a multi-dose vial, places it on flat work surface and thoroughly cleans rubber top of vial with alcohol prep pad.						
6. <ul style="list-style-type: none"> a. Uncaps needle without touching needle tip or shaft; places needle cap on a clean surface or holds open side out between two fingers of non-dominant hand. b. Or if using a vial access device, attaches the device to the syringe and removes the cap, maintaining sterility. 						
7. Draws air into the syringe equal to the amount of medication to be withdrawn.						
8. Maintaining sterility, inserts needle or vial access cannula into vial without coring (or uses a filter needle): <ul style="list-style-type: none"> a. Places the tip of the needle or vial access cannula in the middle of the rubber top of the vial with the bevel up at a 45°–60° angle. b. While pushing the needle or vial cannula device into the rubber top, gradually brings the needle upright to a 90° angle. 						
9. With bevel of the needle above the fluid line, injects the air in the syringe into the air in the vial, not into the fluid.						
10. Inverts vial, keeps needle or vial access device in the medication, and slowly withdraws medication.						
11. Keeping needle or vial access device in vial, expels air bubbles from syringe back into the vial: <ul style="list-style-type: none"> a. Carefully stabilizes the vial and syringe and firmly taps the syringe below the air bubbles OR						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
b. When the air bubbles are at the hub of the syringe, makes sure the syringe is vertical, and pushes the air OR c. Withdraws additional medication if necessary to obtain the correct dose.						
12. When the dose is correct, withdraws needle or vial access device from vial at a 90° angle.						
13. Holds syringe upright at eye level when checking and rechecking medication dose.						
14. If using a filter needle, draws 0.2 mL of air into the syringe, measures medication, and ejects air, as directed in Procedure checklist.						
15. Recaps needle or injection cannula using needle recapping device or an approved one-handed method.						
16. If administering an irritating medication or if a vial access device or filter needle was used to draw up medication, changes the needle prior to administration.						
17. If needle must be changed, follows these steps: a. Holds syringe vertically and draws 0.2 mL of air into the syringe. Holds at eye level and re-checks measured dose. b. Removes filter (or other) needle and reattaches the “saved” (or other sterile) needle for administration c. Measures exact medication dose. Holds syringe vertically to expel all the air. d. If necessary to eject medication after ejecting air, tips the syringe horizontal to do so.						
Grade for Skill					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Mixing Medications from a Vial

Instructions: This skills checklist will be utilized with all skills requiring the student to mix medications from more than one vial. Strict aseptic technique must be observed when performing this skill. Critical behaviors are included in steps 1-7 and steps 15-17.

[illegible]

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
12. <ol style="list-style-type: none"> Without removing the needle (<i>or access device</i>) from the second vial, inverts the vial and withdraws the ordered amount of medication. Using correct technique expels any air bubbles and measures dose at eye level. Removes needle from vial and pulls back on the plunger enough to pull all medication out of the <i>needle (or access device)</i> into the syringe. Reads dose at eye level; holds syringe vertically to eject all air; tips syringe horizontally if any medication must be ejected. 						
13. <ol style="list-style-type: none"> Inserts needle into first vial, inverts, and withdraws the exact ordered amount of medication, holding syringe vertical (when finished, the plunger should be at the line for the total/combined dose. Keeps index finger on the flange of the syringe to prevent it being forced back by pressure. Does not draw excess medication into the syringe. If excess medication is inadvertently drawn into syringe, recognizes error, discards the medication in the syringe, and starts over. (The "total" amount calculated initially should be in the syringe.) 						
14. If a filter needle or VAD was used, draws air into syringe to clear medication from needle and proceeds according to Technique 23-4 in Volume 2.						
15. Removes needle from vial and recaps needle, using needle capping device or approved one-handed scoop method.						
16. Places a new sterile needle on the syringe to be used to give the injection.						
17. Next holds syringe vertically and re-checks the dosage at eye level.						
Grade for Skill					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Administering Subcutaneous Medications

Instructions: This skills checklist will be utilized with all skills requiring the student to prepare and/or administer medication via the subcutaneous route.

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. Prepares and administers medications according to "Medication Guidelines: Steps to Follow for All Medications."						
2. Does not give more than 1 mL of medication in a site.						
3. Selects appropriate syringe and needle. In addition to considering the amount of adipose tissue. <i>a. For insulin, must use an insulin syringe.</i> <i>b. For volumes less than 1 ml, uses a tuberculin (TB) syringe with a 25–27 gauge, 3/8–5/8 inch needle.</i> <i>c. For a volume of 1 mL, a 3 ml syringe may be used with a 25–27 gauge, 3/8–5/8 inch needle.</i> ➔ Faculty please document equipment selected in the comments section.						
4. Selects and locates an appropriate site (outer aspect of the upper arms, abdomen, anterior aspects of the thighs, and the scapular area on the upper back). Site must have adequate subcutaneous tissue. For heparin, the abdomen is the only site used.						
5. Positions patient so the injection site is accessible and patient can relax the area.						
6. Cleanses injection site with alcohol prep pad by circling from the center of the site outward.						
7. Allows the site to dry before administering the injection.						
8. Dons procedure gloves.						
9. Removes the needle cap.						
10. With non-dominant hand, pinches or pulls taut the skin at the injection site. <i>a. If client is obese or "pinch" of adipose tissue is greater than 2 inches, uses a 90° angle.</i> <i>b. If client is average size or "pinch" is less than 1 inch, uses 45° angle.</i> <i>c. If the client is obese and the adipose tissue pinches 2 inches or more, uses a longer needle and spreads the skin taut instead of pinching.</i>						
11. Holding the syringe between thumb and index finger of the dominant hand like a pencil or dart, inserts the needle at the appropriate angle at the into the pinched-up skinfold.						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
12. Stabilizes the syringe with the fingers of the non-dominant hand.						
13. Using thumb or index finger of dominant hand, presses						
14. Removes the needle smoothly along the line of insertion.						
15. Gently blots any blood with a gauze pad. Does not massage the site.						
16. Engages needle safety device or places the uncapped syringe and needle directly into a "sharps" container.						
Grade for Skill					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Locating Intramuscular Injection Sites

Instructions: This checklist will be used for all skills requiring the student to identify intramuscular injections sites. These are the only techniques for locating/identifying intramuscular injections sites that will be accepted. Students must be able to identify the appropriate landmarks and name the muscle they are injecting into to successfully demonstrate this skill.

PROCEDURE STEPS	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. Palpates the landmarks and the muscle mass to ensure correct location and muscle adequacy.						
<i>If the Deltoid Site is designated...</i>						
2. Completely exposes the patient's upper arm, removing the garment if necessary.						
3. Places four fingerbreadths across the deltoid muscle with the top finger on the acromion process. The injection goes three fingerbreadths below the process.						
<i>If the Dorsogluteal site is designated... (Not a site of choice)</i>						
2. Uses this site only if no other sites are available.						
3. Has the patient lie prone.						
4. Locates the greater trochanter and the posterior superior iliac spine.						
5. Draws an imaginary line between the greater trochanter and the posterior superior iliac spine.						
6. In the middle of the line, goes superior (up) approximately 1 inch to locate the site.						
<i>If the Rectus Femoris site is designated... (Not a site of choice)</i>						
2. Divides the top of the thigh from groin to the knee into thirds and identifies the middle third. Visualizes a rectangle in the middle of the anterior surface of the thigh. This is the location of the injection site.						
<i>If the Vastus Lateralis site is designated...</i>						
2. Has patient assume supine or sitting position.						
3. Locates the greater trochanter and the lateral femoral condyle.						
4. Visualizes a rectangle between the hands across the anterolateral thigh. The index fingers of the hands form the smaller ends of the rectangle. The long sides of the rectangle are formed by (a) drawing an imaginary line down the center of the anterior thigh, and (b) drawing another line along the side of the leg, halfway between the bed and the front of the thigh. This box marks the middle third of the anterolateral thigh, which is the injection site.						
<i>If the Ventrogluteal site is designated...</i>						
2. Has patient assume a side-lying position, if possible.						
3. Locates the greater trochanter, anterior superior iliac spine, and the iliac crest.						
4. Places palm of hand on the greater trochanter, index finger on the anterior superior iliac spine, and the middle finger pointing toward the iliac crest. (Uses right						

PROCEDURE STEPS	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
hand on the patient's left hip; uses left hand on the patient's right hip.)						
5. The middle of the triangle between the middle and index fingers is the injection site.						
Grade for Skill					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Preparing and Administering Intramuscular Injections

Instructions: Students will also be responsible for strict asepsis when performing this skill.

PROCEDURE STEPS	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. Prepares and administers medications according to "Medication Guidelines: Steps to Follow for All Medications."						
2. Selects appropriate syringe and needle, considering volume and type of medication, and patient's muscle mass. <i>Syringe size chosen: _____/_____</i> <i>Needle length chosen: _____/_____</i> <i>Needle gauge chosen: _____/_____</i>						
3. Selects a preferred site for injection and locates site correctly.						
4. If patient has received other injections, rotates sites.						
5. Positions patient so the injection site is accessible and the patient is able to relax the appropriate muscles. <i>Faculty will designate injection site.</i> a. Deltoid site: Positions patient with arm relaxed at side or resting on firm surface and completely expose upper arm. <i>Landmarks identified for site designated by faculty member: _____</i> <i>Name of muscle to be injected into: _____</i> b. Ventrogluteal site: Positions patient on side with upper hip and knee slightly flexed. <i>Landmarks identified for site designated by faculty member: _____</i> <i>Name of muscle to be injected into: _____</i> c. Vastus lateralis: Positions patient supine or sitting. <i>Landmarks identified for site designated by faculty member: _____</i> <i>Name of muscle to be injected into: _____</i> d. Rectus femoris: Positions patient supine. <i>Landmarks identified for site designated by faculty member: _____</i> <i>Name of muscle to be injected into: _____</i>						

PROCEDURE STEPS	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
e. Dorsogluteal: Positions patient prone with toes pointing inward. Does not attempt to locate this site with the patient side-lying or standing. <i>Landmarks identified for site designated by faculty member: _____</i> <i>Name of muscle to be injected into: _____</i> _____						
6. Cleanses injection site with alcohol prep pad (or other antiseptic swab) by circling from the center of the site outward. Places alcohol wipe on patient's skin outside the injection site, with a corner pointing to the site.						
7. Allows the site to dry before administering the injection.						
8. Dons procedure gloves.						
9. Removes the needle cap.						
<i>Steps for using the Traditional Intramuscular Method if designated...</i>						
10. With non-dominant hand, holds the skin taut by						
11. Holding the syringe between thumb and fingers of the dominant hand like a pencil or dart, inserts the needle at a 90° angle to the skin surface.						
12. Inserts needle fully.						
13. Stabilizes syringe and aspirates by pulling back on the plunger and waiting for 5 to 10 seconds. If there is a blood return, removes the needle, discards, and prepares the medication again.						
14. Still stabilizing syringe, uses thumb or index finger of dominant hand, presses plunger slowly to inject the medication (5 to 10 seconds per mL).						
15. Removes the needle smoothly along the line of insertion.						
16. Engages safety needle device, and disposes in biohazard container. If there is no safety device, places uncapped syringe and needle directly in biohazard puncture-proof container.						
17. Gently massages site with a gauze pad and applies Band-Aid as needed.						
<i>Steps for using the Z-Track Administration if designated...</i>						
10. Follows Steps 1 through 9, above.						
11. With the side of the non-dominant hand displaces the skin away from the injection site, about 2.5 to 3.5cm (1 to 1.5 inches).						
12. Holding the syringe between thumb and fingers of the dominant hand like a pencil or dart, inserts the needle at a 90° angle to the skin surface.						
13. Stabilizes the syringe with thumb and forefinger of non-dominant hand. Does not release the skin to stabilize the						

PROCEDURE STEPS	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
syringe.						
14. Aspirates by pulling back slightly on the plunger for 5 to 10 seconds. If a blood return is obtained, removes the needle, discards, and prepares the medication again.						
15. Using thumb or index finger of dominant hand, presses plunger slowly to inject the medication (5 to 10 seconds per mL).						
16. Waits for 10 seconds, then removes the needle smoothly along the line of insertion; then immediately releases the skin.						
17. Engages safety needle device, and disposes in biohazard container. If there is no safety device, places uncapped syringe and needle directly in biohazard puncture-proof container.						
18. Does not massage the injection site.						
Grade for Skill					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Applying Sterile Gloves (Open Method)

Instructions: This skills checklist will be utilized with all skills requiring sterile gloving.

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. Opens outer wrapper and places glove package on clean, dry surface.						
2. Opens inner package so that glove cuffs are nearest to the nurse.						
3. Fully opens the package flaps so they do not fold back over and contaminate the gloves.						
4. Takes care to not touch anything else on the sterile field, with non-dominant hand grasps the inner surface of the glove for the dominant hand and lifts up and away from the table.						
5. Slides dominant hand into the glove, keeping hand and fingers above the waist and away from the body.						
6. Slides gloved fingers under the cuff of the glove for the non-dominant hand.						
7. Lifts the glove up and away from the table and away from the body.						
8. Slides non-dominant hand into the glove, avoiding contact with the gloved hand.						
9. Adjusts both gloves to fit the fingers and so that there is no excess at the fingertips.						
10. Keeps the hands between shoulder and waist level.						
Grade for Skill					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Preparing and Maintaining the Sterile Field

Instructions: This checklist will be used for all skills requiring preparation and maintenance of a/the sterile field.

PROCEDURE STEPS	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
<i>Preparing a Sterile Field With Commercial Package</i>						
1. Places sterile package on a clean, dry surface.						
2. Opens flaps in this order to create a sterile field: a. Opens the flap farthest from own body. b. Opens side flaps. c. Opens flap nearest body.						
3. Treats as unsterile the area 1 inch from all edges of the wrapper, and any area hanging over the edge of the table.						
<i>Preparing a Sterile Drape</i>						
4. Places package on a clean, dry surface.						
5. Holds the edge of the package flap down toward the table and grasps the top edge of the package and peels back.						
6. Picks up sterile drape by the corner and allows it to fall open without touching unsterile surfaces.						
7. Places drape on a clean, dry surface, touching only the edge of the drape.						
8. Does not fan the drape.						
<i>Adding Supplies to a Sterile Field</i>						
9. Using the non-dominant hand, peels back the wrapper in which the item is wrapped, creating a sterile barrier field with the inside of the wrapper.						
10. Holding the contents through the wrapper, several inches above the field, allows the supplies to drop onto the field inside the 1-inch border of the sterile field.						
11. Does not let arms pass over the sterile field; does not touch supplies with non-sterile hands.						
12. Disposes of wrapper and continues opening any needed supplies for the procedure.						
<i>Adding Sterile Solutions to a Sterile Field</i>						
13. If sterile field is fabric or otherwise at risk for Strikethrough, uses a sterile bowl or receptacle. It may be added to the field by unwrapping as described in the preceding section.						
Grade for Skill					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Wound Management (Dry, Sterile Dressing Change – Closed Wound)

Instructions: Student will be responsible for establishing and maintain a sterile field and sterile gloving when performing this skill.

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. Assess client allergies, pain level and condition of the “old” dressing. Verify physician’s order.						
2. Explain procedure to patient.						
3. Gather equipment.						
4. Perform hand hygiene.						
5. Note if drain is present.						
6. Close door or curtain. Use bath blanket as needed when exposing area to be redressed. Position waterproof pad under patient if desired. Expose only the wound area.						
7. Assist patient to comfortable position that provides easy access to wound area.						
8. Place opened cuffed plastic bag near working area. Don a mask if required.						
9. Don gloves and use appropriate infection control procedures as indicated. Loosen tape dressing. Use adhesive remover, if necessary. Pull tape by holding down the skin and pull gently but firmly towards the wound.						
10. Remove soiled dressings carefully in a clean to less clean direction. Do not reach over wound. Check position of drains before removing dressing. If dressing adheres to skin surface, moisten by pouring a small amount of sterile saline onto it. Keep soiled side of dressing away from patient’s view.						
11. Discard dressings in plastic disposal bag. Pull off gloves inside out and drop it in bag						
12. Assess the location, amount, type, and odor of drainage.						
13. Perform hand hygiene.						
14. Using aseptic technique, open sterile dressings and supplies on work area. Place sterile drape next to wound.						
15. Open sterile cleaning solution and pour over gauze sponges in plastic container or over sponges placed in sterile basin.						
16. Don sterile gloves.						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
17. Clean wound or surgical incision. Use sterile forceps if desired – keep the forcep tips lower than the handles at all time.						
18. Clean from top to bottom or from center outward. Use one gauze square for each wipe, discarding each square by dropping into plastic bag. Do not touch bag with forceps.						
19. Clean around drain, if present, moving from center outward in a circular motion. Use one gauze square for each circular motion.						
20. Dry around the wound using gauze sponge and same motion. Do not dry the incision itself.						
21. Apply a layer of dry sterile dressings over wound. Use sterile forceps if desired.						
22. Fold sterile 4 x 4 gauze squares to place under and around drain if one is present or use sterile gauze.						
23. Apply second gauze layer to wound site.						
24. Place Surgi-Pad or ABD dressing over wound at outermost area.						
25. Apply tape or tie existing tapes to secure dressings.						
26. Perform hand hygiene. Remove all equipment. Make patient comfortable.						
Grade for Skill					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Oropharyngeal and Nasopharyngeal Suctioning

Instructions: Students will also be responsible for establishing and maintaining a sterile field and sterile gloving to successfully complete this skill.

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. Positions the patient: a. For oropharyngeal suctioning: Semi-Fowler's position with his head turned toward the nurse. b. Nasopharyngeal suctioning: Semi-Fowler's position with his head hyperextended (unless contraindicated).						
2. Places the linen-saver pad or towel on the patient's chest.						
3. Puts on a face shield or goggles.						
4. Turns on the wall suction or portable suction machine and adjusts the pressure regulator according to policy. <i>** Faculty please document the setting that student has chosen in the column with comments. →</i>						
5. Tests the suction equipment by occluding the connection tubing.						
6. Opens the suction catheter kit or the gathered equipment if a kit is not available. If using the nasal approach, opens the water-soluble lubricant (optional).						
7. Dons sterile gloves; keeps the dominant hand sterile; considers non-dominant hand non-sterile.						
8. Pours sterile saline into the sterile container, using the non-dominant hand.						
9. Picks up the suction catheter with the dominant hand and attaches it to the connection tubing (to suction).						
10. Puts the tip of the suction catheter into the sterile container of normal saline solution and suctions a small amount of normal saline solution through the suction catheter. Applies suction by placing a finger over the suction control port.						
11. Approximates the depth to which to insert the suction catheter: a. Oropharyngeal suctioning: Measures the distance between the edge of the patient's mouth and the tip of the patient's ear lobe. b. Nasopharyngeal suctioning: Measures the distance between the tip of the patient's nose and the tip of the patient's ear lobe.						
12. Using the non-dominant hand, removes the oxygen delivery device, if present. Has the patient take several slow deep breaths. If the patient's oxygen						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
saturation is < 94%, or if he is in any distress, administers supplemental oxygen before, during, and after suctioning. See Procedure Checklist Chapter 35: Administering Oxygen by Cannula, Face Mask, or Face Tent..						
13. Lubricates and inserts the suction catheter: <ul style="list-style-type: none"> a. Oropharyngeal suctioning <ul style="list-style-type: none"> i. Lubricates the catheter tip with normal saline. ii. Using the dominant hand, gently but quickly inserts the suction catheter along the side of the patient's mouth into the oropharynx. iii. Advances the suction catheter quickly to the premeasured distance (usually 7 to 10 cm in the adult), being careful not to force the catheter. b. Nasopharyngeal suctioning <ul style="list-style-type: none"> i. Lubricates the catheter tip with the water-soluble lubricant or with normal saline. ii. Using the dominant hand, gently but quickly inserts the suction catheter into the naris. iii. Advances the suction catheter quickly to the premeasured distance (13 to 15 cm in the adult), being careful not to force the catheter. iv. If resistance is met, tries using the other naris. 						
14. Places a finger (thumb) over the suction control port of the suction catheter and starts suctioning the patient. Applies suction while withdrawing the catheter in a continuous rotating motion.						
15. Limits suctioning to 5 to 10 seconds.						
16. After the catheter is withdrawn, clears it by placing the tip of the catheter into the container of sterile saline and applying suction.						
17. Lubricates the catheter and repeats suctioning as needed, allowing at least 20-second intervals between suctioning. For nasopharyngeal suctioning, alternates nares each time suction is repeated.						
18. Coils the suction catheter in the dominant hand. Pulls the sterile glove off over the coiled catheter. (Alternatively, wraps the catheter around the dominant gloved hand and holds the catheter while removing the glove over it.)						
Grade for skill:					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Urinary Catheterization: Male Straight

Instructions: Students will also be responsible for establishing and maintaining a sterile field and sterile gloving with skill to successfully demonstrate this skill.

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. Takes an extra pair of sterile gloves and an extra sterile catheter into the room.						
2. Provides good lighting; takes a procedure lamp to the bedside if necessary.						
3. Works on the right side of the bed if right-handed; the left side, if left-handed.						
4. Assists to dorsal recumbent position (knees flexed, feet flat on the bed). Instructs patient to relax her thighs and let them rotate externally (if patient is able to cooperate). Alternatively, uses Sims' position (side-lying with upper leg flexed at hip).						
5. If patient is confused, unable to follow directions, or unable to hold her legs in correct position, obtains help.						
6. Drapes patient. If dorsal recumbent position is used, folds blanket in a diamond shape, wraps corners around legs, anchors under feet, and folds upper corner down over perineum. If in Sims' position, drapes so that rectal area is covered.						
7. Dons clean procedure gloves and washes the perineal area with soap and water; dries perineal area.						
8. While washing perineum, locates the urinary meatus.						
9. Removes and discards gloves.						
10. Washes hands.						
11. Organizes the work area: <ul style="list-style-type: none"> a. Bedside or over-bed table within nurse's reach. b. Opens sterile catheter kit and places on bedside table without contaminating the inside of the wrap. c. Positions a plastic bag or other trash receptacle so that nurse does not have to reach across the sterile field (e.g., near the patient's feet); or places a trash can on the floor beside the bed. d. Positions the procedure light or has assistant hold a flashlight. 						
12. Lifts corner of privacy drape (e.g., bath blanket) to expose perineum.						
13. Applies sterile drape(s) and underpad.						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
<i>Variation: Steps to use if waterproof underpad packed as top item in the kit...</i>						
14. <ul style="list-style-type: none"> g. Removes the underpad from the kit before donning sterile gloves. Does not touch other kit items with bare h. Touching only the corners and shiny side, places the drape flat on the bed, shiny side down, and tucks the top edge under the patient's buttocks. i. Lifts corner of privacy drape (e.g., bath blanket) to expose perineum j. Dons sterile gloves (from kit). (Touching only the glove package, removes it from sterile kit before donning gloves). k. Places fenestrated drape: Picks it up, allowing it to unfold without touching any other objects. Keeps gloves sterile. l. Places fenestrated drape so that hole is over the penis. 						
<i>Variation: Steps to use if sterile gloves are packed as top item in the kit...</i>						
14. <ul style="list-style-type: none"> g. Removes gloves from package, being careful not to touch anything else in the package with bare hand. Dons gloves. h. Grasps the edges of the sterile underpad and folds the entire edge down 2.5 to 5 cm (1 to 2 inches) and toward self, forming a cuff to protect the sterile gloved hands. i. Asks patient to raise her hips slightly if she is able j. Slides the drape under patient's buttocks without contaminating the gloves. k. Places fenestrated drape: Picks it up, allowing it to unfold without touching any other objects. Keeps gloves sterile. l. Places fenestrated drape so that hole is over the penis 						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
<p>15. Organizes kit supplies on the sterile field and prepares the supplies in the kit, maintaining sterility.</p> <ol style="list-style-type: none"> Opens the antiseptic packet; pours solution over the cotton balls. (Some kits contain sterile antiseptic swabs; if so, opens the “stick” end of the packet.) Lays forceps near cotton balls (omits step if using swabs). Opens specimen container if a specimen is to be collected. Removes any unneeded supplies (e.g., specimen container) from the field. Removes plastic covering from catheter. Opens package and expresses sterile lubricant into the kit tray; lubricates the first 1 to 2 inches (2.5 to 5 cm) of the catheter by rolling it in the lubricant. Does not lubricate catheter if Xylocaine gel has already been inserted into the urethra. 						
16. With non-dominant hand, reaches through the opening in the fenestrated drape and grasps the penis, taking care not to contaminate the surrounding drape. If penis is uncircumcised, retracts foreskin with non-dominant hand to expose the meatus.						
17. If the foreskin accidentally falls back over the meatus, or if the nurse drops the penis during cleansing, repeats the procedure.						
18. Continuing to hold the penis with the non-dominant hand, holds forceps in dominant hand and picks up a cotton ball.						
19. Beginning at the meatus, cleanses the glans in a circular motion in ever-widening circles and partially down the shaft of the penis.						
20. Repeats with at least one more cotton ball.						
21. Maintaining sterile technique, places the plastic urine receptacle close enough to the urinary meatus for the end of the catheter to rest inside the container as the urine drains (e.g., places container between patient's thighs)						
22. Using the non-dominant hand, holds the penis gently but firmly at a 90° angle to the body, exerting gentle traction.						
23. Gently inserts the tip of the prefilled syringe into the urethra and instill the lubricant. (If the kit contains only a single packet of lubricant and if no other kits are available, lubricates 5 to 7 inches (12.5 to 17.7 cm) of the catheter. This is not the technique of choice, however.)						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
24. With the dominant hand, holds the catheter 3 inches (7.5 cm) from the proximal end, with remainder coiled in the palm of the hand; or otherwise ensures that the distal end of the catheter is in the plastic container.						
25. Asks the patient to bear down as though trying to void; slowly inserts the end of the catheter into the meatus. Has the patient take slow deep breaths until the initial discomfort has passed.						
26. Continues gentle insertion of catheter until urine flows. This is about 7 to 9 inches (17 to 22.5 cm) in a man. Then inserts the catheter another 1 to 2 inches (2.5 to 5 cm).						
27. If resistance is felt, withdraws the catheter; does not force the catheter.						
28. Continues to hold the penis and catheter securely in hand while the urine drains from the bladder.						
29. If a urine specimen is to be collected, uses dominant hand to place the specimen container into the flow of urine; caps container using sterile technique.						
30. When the flow of urine has ceased and the bladder has been emptied, pinches the catheter and slowly withdraws it from the meatus.						
31. Discards catheter.						
32. Removes the urine-filled receptacle and sets aside to be emptied when the procedure is finished.						
33. Cleanses and dries patient's penis and perineal area as needed; replaces foreskin over end of penis.						
34. Removes gloves; washes hands.						
35. Returns patient to a position of comfort.						
36. Discards supplies in appropriate receptacle.						
Grade fo Skill:					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Urinary Catheterization: Female Straight

Instructions: Students will also be responsible for establishing and maintaining a sterile field and sterile gloving with skill to successfully demonstrate this skill.

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. Takes an extra pair of sterile gloves and an extra sterile catheter into the room.						
2. Provides good lighting; takes a procedure lamp to the bedside if necessary.						
3. Works on the right side of the bed if right-handed; the left side, if left-handed.						
4. Assists to dorsal recumbent position (knees flexed, feet flat on the bed). Instructs patient to relax her thighs and let them rotate externally (if patient is able to cooperate). Alternatively, uses Sims' position (side-lying with upper leg flexed at hip).						
5. If patient is confused, unable to follow directions, or unable to hold her legs in correct position, obtains help.						
6. Drapes patient. If dorsal recumbent position is used, folds blanket in a diamond shape, wraps corners around legs, anchors under feet, and folds upper corner down over perineum. If in Sims' position, drapes so that rectal area is covered.						
7. Dons clean procedure gloves and washes the perineal area with soap and water; dries perineal area.						
8. While washing perineum, locates the urinary meatus.						
9. Removes and discards gloves.						
10. Washes hands.						
11. Organizes the work area: <ul style="list-style-type: none"> a. Bedside or over-bed table within nurse's reach. b. Opens sterile catheter kit and places on bedside table without contaminating the inside of the wrap. c. Positions a plastic bag or other trash receptacle so that nurse does not have to reach across the sterile field (e.g., near the patient's feet); or places a trash can on the floor beside the bed. d. Positions the procedure light or has assistant hold a flashlight. 						
12. Lifts corner of privacy drape (e.g., bath blanket) to expose perineum.						
13. Applies sterile drape(s) and underpad.						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
<i>Variation: Steps to use if waterproof underpad packed as top item in the kit...</i>						
14. <ul style="list-style-type: none"> m. Removes the underpad from the kit before donning sterile gloves. Does not touch other kit items with bare n. Touching only the corners and shiny side, places the drape flat on the bed, shiny side down, and tucks the top edge under the patient's buttocks. o. Lifts corner of privacy drape (e.g., bath blanket) to expose perineum p. Dons sterile gloves (from kit). (Touching only the glove package, removes it from sterile kit before donning gloves). q. Picks up fenestrated drape; allows it to unfold without touching other objects; places over perineum with the hole over the labia. 						
<i>Variation: Steps to use if sterile gloves are packed as top item in the kit...</i>						
14. <ul style="list-style-type: none"> m. Removes gloves from package, being careful not to touch anything else in the package with bare hand. Dons gloves. n. Grasps the edges of the sterile underpad and folds the entire edge down 2.5 to 5 cm (1 to 2 inches) and toward self, forming a cuff to protect the sterile gloved hands. o. Asks patient to raise her hips slightly if she is able p. Slides the drape under patient's buttocks without contaminating the gloves. q. Places fenestrated drape: Picks it up, allowing it to unfold without touching any other objects. Creates "cuff" to protect gloves. r. Places fenestrated drape so that hole is over labia. 						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
<p>15. Organizes kit supplies on the sterile field and prepares the supplies in the kit, maintaining sterility.</p> <ol style="list-style-type: none"> Opens the antiseptic packet; pours solution over the cotton balls. (Some kits contain sterile antiseptic swabs; if so, opens the “stick” end of the packet.) Lays forceps near cotton balls (omits step if using swabs). Opens specimen container if a specimen is to be collected. Removes any unneeded supplies (e.g., specimen container) from the field. Removes plastic covering from catheter. Opens package and expresses sterile lubricant into the kit tray; lubricates the first 1 to 2 inches (2.5 to 5 cm) of the catheter by rolling it in the lubricant. 						
<p>16. Touching only the kit or the inside of the wrapping, places the sterile catheter kit down onto the sterile field.</p>						
<p>17. Cleanses the urinary meatus.</p> <ol style="list-style-type: none"> Places non-dominant hand above the labia and with the thumb and forefinger spreads the patient’s labia, pulls up (or anteriorly) at the same time, to expose the urinary meatus. Holds this position throughout the procedure—firm pressure is necessary. If the labia slip back over the urinary meatus, considers it contaminated and repeats cleansing procedure. Using forceps, with dominant hand, picks up a wet cotton ball and cleanses perineal area, taking care not to contaminate the sterile glove. Uses one stroke for each area. Wipes from front to back. Uses a new cotton ball for each area. Cleanses in this order: outside far labium majus, outside near labium majus, inside far labium, inside near labium, and directly down the center over the urinary meatus. (Some kits have only 3 cotton balls, so the order would be inside far labium, inside near labium, and directly down the center; the outside labia majora would have already been cleansed with soap and water.) 						
<p>18. Discards used cotton balls as they are used; does not move them across the open, sterile kit and field.</p>						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
19. Maintaining sterile technique, places the urine receptacle close enough to the urinary meatus for the end of the catheter to rest inside the container as the urine drains (4 inches or 10 cm from the meatus).						
20. Asks the woman to bear down as though she is trying to void; slowly inserts the end of the catheter into the meatus. Has the patient take slow deep breaths until the initial discomfort has passed.						
21. Continues gentle insertion of catheter until urine flows. This is about 2 to 3 inches (5 to 7.5 cm) in a woman. Then inserts the catheter another 1 to 2 inches (2.5 to 5 cm).						
22. If resistance is felt, twists the catheter slightly or applies gentle pressure; does not force the catheter.						
23. If the catheter touches the labia or non-sterile linens, or is inadvertently inserted in the vagina, considers it contaminated and inserts a new, sterile catheter.						
24. If catheter is inadvertently inserted into the vagina, leaves the contaminated catheter in the vagina while urine drains from the bladder.						
25. Continues to hold the catheter securely with the non-dominant hand while urine drains from the bladder.						
26. If a urine specimen is to be collected, uses dominant hand to place the specimen container into the flow of urine; caps container using sterile technique.						
27. When the flow of urine has ceased and the bladder has been emptied, pinches the catheter and slowly withdraws it from the meatus.						
28. Discards catheter, observing universal precautions.						
29. Removes the urine-filled receptacle and sets aside to be emptied when the procedure is finished.						
30. Cleanses patient's perineal area as needed, and dries.						
31. Removes gloves; washes hands.						
32. Returns patient to a position of comfort.						
33. Discards supplies in appropriate receptacle.						
Grade for Skill					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Urinary Catheterization: Male Indwelling

Instructions: Students will also be responsible for establishing and maintaining a sterile field and sterile gloving with skill to successfully demonstrate this skill.

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. Takes an extra pair of sterile gloves and an extra sterile catheter into the room.						
2. Selects a catheter kit that contains lubricant in a prefilled syringe.						
3. Provides good lighting; takes a procedure lamp to the bedside if necessary.						
4. Works on the right side of the bed if right-handed; the left side, if left-handed.						
5. Places patient supine, legs straight and slightly apart.						
6. If patient is confused or unable to follow directions, obtains help.						
7. Drapes patient. Covers upper body with blanket; folds linens down to expose the penis.						
8. Dons clean procedure gloves and washes the penis and perineal area with soap and water; dries gently.						
9. If using 2% Xylocaine gel for the procedure, uses a syringe and inserts it into the urethra.						
10. Removes and discards gloves.						
11. Washes hands.						
12. Organizes the work area: a. Bedside or over-bed table within nurse's reach. b. Opens sterile catheter kit and places on bedside table, without contaminating the inside of the wrap. c. Positions a plastic bag or other trash receptacle so that nurse does not have to reach across the sterile field (e.g., near the patient's feet); or places a trash can on the floor beside the bed.						
13. Applies sterile drape(s) and underpad.						
<i>Variation: Steps to use if waterproof underpad packed as top item in the kit...</i>						
14. a. Removes the waterproof underpad from the kit before donning sterile gloves. Does not						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
<p>touch other kit items with bare hands. Allows drape to fall open as it is removed from the kit.</p> <p>b. Allows drape to fall open as it is removed from the kit. Touching only the corners and shiny side, places the drape shiny side down across top of patient's thighs.</p> <p>c. Dons sterile gloves (from kit). (Touching only the glove package, removes it from the sterile kit before donning the gloves.)</p>						
<i>Variation: Steps to use if sterile gloves are packed as top item in the kit...</i>						
<p>14.</p> <p>a. Removes gloves from package, being careful not to touch anything else in the package with bare hand. Dons gloves.</p> <p>b. Grasps the edges of the sterile underpad and places it shiny side down across the top of the patient's thighs.</p> <p>c. Places fenestrated drape: Picks it up, allowing it to unfold without touching any other objects. Keeps gloves sterile.</p> <p>d. Places fenestrated drape so that hole is over the penis.</p>						
<p>15. Organizes kit supplies on the sterile field and prepares the supplies in the kit, maintaining sterility.</p> <p>a. Opens the antiseptic packet; pours solution over the cotton balls. (Some kits contain sterile antiseptic swabs; if so, opens the "stick" end of the packet.)</p> <p>b. Lays forceps near cotton balls (omit step if using swabs).</p> <p>c. Opens specimen container if a specimen is to be collected.</p> <p>d. Removes any unneeded supplies (e.g., specimen container) from the field.</p> <p>e. Expresses a small amount of sterile lubricant into the kit tray; lubricates the first 1 to 2 inches of the catheter by rolling it in the lubricant. Does not lubricate catheter if Xylocaine gel has already been inserted into the urethra.</p> <p>f. Attaches the saline-filled syringe to the side port of the catheter and checks balloon by inflating; deflates balloon and returns it and the catheter to the kit. Leaves syringe attached to catheter.</p>						
<p>16. Touching only the kit or inside of the wrapping, places the sterile catheter kit down onto the sterile field between or on top of the patient's thighs.</p>						
<p>17. If the drainage bag is pre-connected to the catheter, leaves the bag on the sterile field until after the</p>						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
catheter is inserted.						
18. With non-dominant hand, reaches through the opening in the fenestrated drape and grasps the penis, taking care not to contaminate the surrounding drape. If penis is uncircumcised, retracts foreskin to expose the meatus.						
19. If the foreskin accidentally falls back over the meatus,						
20. Continuing to hold the penis with the non-dominant hand, holds forceps in dominant hand and picks up a cotton ball.						
21. Beginning at the meatus, cleanses the glans in a circular motion in ever-widening circles and partially down the shaft of the penis.						
22. Repeats with at least one more cotton ball.						
23. Discards cotton balls or swabs as they are used; does not move them across the open, sterile kit and field.						
24. Using the non-dominant hand, holds the penis gently but firmly at a 90° angle to the body, exerting gentle traction.						
25. Gently inserts the tip of the prefilled syringe into the urethra and instill the lubricant. (If the kit contains only a single packet of lubricant and if no other kits are available, then lubricates 5 to 7 inches (12.5 to 17.7 cm) of the catheter. This is not the technique of choice, however.)						
26. With the dominant hand, holds the catheter 3 inches (7.5 cm) from the proximal end, with remainder of the catheter coiled in palm of hand.						
27. Asks the patient to bear down as though trying to void; slowly inserts the end of the catheter into the meatus. Has the patient take slow deep breaths until the initial discomfort has passed.						
28. Continues gentle insertion of catheter until urine flows. This is about 7 to 9 inches (17 to 22.5 cm) in a man. Then inserts the catheter another 1 to 2 inches (2.5 to 5 cm).						
29. If resistance is felt, withdraws the catheter; does not force the catheter.						
30. After urine flows, stabilizes the catheter's position in the urethra with non-dominant hand; uses dominant hand to pick up saline-filled syringe and inflate catheter balloon.						
31. If patient complains of severe pain upon inflation of the balloon, the balloon is probably in the urethra. Allows the water to drain out of the balloon, and advances the catheter 1 inch (2.5) farther into the						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
bladder.						
32. If it is not pre-connected, connects the drainage bag to the end of the catheter.						
33. Hangs the drainage bag on the side of the bed below the level of the bladder.						
34. Using tape or a catheter strap, secures the catheter to the thigh or the abdomen.						
35. Cleanses patient's penis and perineal area as needed, and dries. Ensures that foreskin is no longer retracted.						
36. Returns patient to a position of comfort.						
37. Discards supplies in appropriate receptacle.						
Grade for Skill:					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Urinary Catheterization: Female Indwelling

Instructions: Students will also be responsible for establishing and maintaining a sterile field and sterile gloving with skill to successfully demonstrate this skill.

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
1. Takes an extra pair of sterile gloves and an extra sterile catheter into the room.						
2. Provides good lighting; takes a procedure lamp to the bedside if necessary.						
3. Works on the right side of the bed if right-handed; the left side, if left-handed.						
4. Assists to dorsal recumbent position (knees flexed, feet flat on the bed). Instructs patient to relax her thighs and let them rotate externally (if patient is able to cooperate). Alternatively, uses Sims' position (side-lying with upper leg flexed at hip).						
5. If patient is confused, unable to follow directions, or unable to hold her legs in correct position, obtains help.						
6. Drapes patient. If dorsal recumbent position is used, folds blanket in a diamond shape, wraps corners around legs, anchors under feet, and folds upper corner down over perineum. If in Sims' position, drapes so that rectal area is covered.						
7. Dons clean procedure gloves and washes the perineal area with soap and water; dries perineal area.						
8. While washing perineum, locates the urinary meatus.						
9. Removes and discards gloves.						
10. Washes hands.						
11. Organizes the work area:						
a. Bedside or over-bed table within nurse's reach.						
b. Opens sterile catheter kit and places on bedside table without contaminating the inside of the wrap.						
c. Positions a plastic bag or other trash receptacle so that nurse does not have to reach across the sterile field (e.g., near the patient's feet); or places a trash can on the floor beside the bed.						
d. Positions the procedure light or has assistant hold a flashlight.						
e. Lifts corner of privacy drape (e.g., bath						
f. blanket) to expose perineum.						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
g. Applies sterile drape(s) and underpad.						
<i>Variation: Steps to use if waterproof underpad packed as top item in the kit...</i>						
12. r. Removes the underpad from the kit before donning sterile gloves. Does not touch other kit items with bare						
s. Touching only the corners and shiny side, places the drape flat on the bed, shiny side down, and tucks the top edge under the patient's buttocks.						
t. Lifts corner of privacy drape (e.g., bath blanket) to expose perineum						
u. Dons sterile gloves (from kit). (Touching only the glove package, removes it from sterile kit before donning gloves).						
v. Picks up fenestrated drape; allows it to unfold without touching other objects; places over perineum with the hole over the labia.						
<i>Variation: Steps to use if sterile gloves are packed as top item in the kit...</i>						
12. r. Removes gloves from package, being careful not to touch anything else in the package with bare hand. Dons gloves. s. Grasps the edges of the sterile underpad and folds the entire edge down 2.5 to 5 cm (1 to 2 inches) and toward self, forming a cuff to protect the sterile gloved hands. t. Asks patient to raise her hips slightly if she is able. u. Slides the drape under patient's buttocks without contaminating the gloves. v. Places fenestrated drape: Picks it up, allowing it to unfold without touching any other objects. Creates "cuff" to protect gloves, as in step 12-l. w. Places fenestrated drape so that hole is over labia.						
13. Organizes kit supplies on the sterile field and prepares the supplies in the kit, maintaining sterility.						
a. Opens the antiseptic packet; pours solution over the cotton balls. (Some kits contain sterile antiseptic swabs; if so, opens the "stick" end of the packet.)						
b. Lays forceps near cotton balls (omits step if						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
using swabs).						
c. Opens specimen container if a specimen is to be collected.						
d. Removes any unneeded supplies (e.g., specimen container) from the field.						
e. Removes plastic covering from catheter.						
f. Opens package and expresses sterile lubricant into the kit tray; lubricates the first 1 to 2 inches (2.5 to 5 cm) of the catheter by rolling it in the lubricant.						
g. Removes plastic cover from catheter. Attaches the saline-filled syringe to the side port of the catheter and inflates the balloon.						
14. Touching only the sterile box or inside of the wrapping, places the sterile catheter kit (tray and box) down onto the sterile field between the patient's legs.						
15. If the drainage bag is preconnected to the catheter itself, leaves the bag on or near the sterile field until after the catheter is inserted.						
16. Cleanses the urinary meatus.						
a. Places nondominant hand above the labia and with the thumb and forefinger spreads the patient's labia, pulls up (or anteriorly) at the same time, to expose the urinary meatus.						
b. Holds this position throughout the procedure—firm pressure is necessary.						
c. If the labia slip back over the urinary meatus, considers it contaminated and repeats cleansing procedure.						
d. With dominant hand, picks up a wet cotton ball (or swab), using forceps, and cleanses perineal area, taking care not to contaminate the sterile glove.						
e. Uses one stroke for each area.						
f. Wipes from front to back.						
g. Uses a new cotton ball for each area.						
h. Cleanses in this order: outside far labium majus, outside near labium majus, inside far labium, inside near labium, and directly down the center over the urinary meatus. If there are only 3 cotton balls in the kit, labia majora should be washed with soap and water initially; and in this step, cleanses only the inside far labium majus, inside near labium, and down center directly over the meatus.						
17. Discards used cotton balls or swabs as they are used; does not move them across the open, sterile kit and field.						
18. With the dominant hand, holds the catheter approximately 3 inches (7.5 cm) from the proximal						

Skill Steps	Satisfactory		Unsatisfactory		COMMENTS	
	Attempt #1	Attempt #2	Attempt #1	Attempt #2	Attempt #1	Attempt #2
end; coils remainder of catheter in palm of hand or otherwise protects it from contamination.						
19. Asks the woman to bear down as though she is trying to void; slowly inserts the end of the catheter into the meatus. Has the patient take slow deep breaths until the initial discomfort has passed.						
20. If resistance is felt, twists the catheter slightly or applies gentle pressure; does not force the catheter.						
21. If the catheter touches the labia or non-sterile linens, or is inadvertently inserted in the vagina, considers it contaminated and inserts a new, sterile catheter.						
22. If catheter is inadvertently inserted into the vagina, leaves the contaminated catheter in the vagina while inserting the new one into the meatus.						
23. Continues to hold the catheter securely with the dominant hand; after urine flows, stabilizes the catheter's position in the urethra and uses the non-dominant hand to pick up the saline-filled syringe and inflate the catheter balloon.						
24. If the patient complains of severe pain upon inflation of the balloon, the catheter is probably in the urethra. Allows the water to drain out of the balloon and repositions the catheter by advancing it 1 inch (2.5 cm).						
25. Connects the drainage bag to the end of the catheter if it is not already pre-connected. Hangs the drainage bag on the side of the bed, below the level of the bladder.						
26. Using a tape or a catheter strap, secures the catheter to the thigh.						
27. Cleanses patients perineal area as needed, and dries.						
28. Removes gloves; washes hands.						
29. Returns patient to a position of comfort.						
30. Discards supplies in appropriate receptacle.						
Grade for Skill:					Attempt #1: Pass/Fail	
					Attempt #2: Pass/Fail	

Physical Assessment Demonstration

Students must earn 90/100 points to pass the physical assessment demonstration. Students scoring less than 90 points will be required to remediate in the campus lab and schedule a second demonstration with one of the lab faculty.

CRITERIA	Performance	Comments
Preparation (10 points total this section): <i>Student provides for client's comfort and implements instructions/actions to conserve the client's energy during the examination. Student also demonstrates efficient use of time, organizational skills and effective communication skills. Additionally, the student:</i>		
❖ Perform hand hygiene. (2 points)		
❖ Assemble equipment. Provide adequate lighting and privacy. (2 points)		
❖ Explain the procedure and purpose to client and provide client with explanations throughout the assessment. Request permission to touch the client (2 points)		
❖ Perform the assessment in a systematic manner. (2 points)		
❖ Performs the assessment in an organized and timely fashion. (2 points)		
Physical Assessment (90 points): <i>This involves the application of knowledge and skill. Besides demonstrating assessment skills, students are to demonstrate knowledge of normal anatomy and physiology (e.g. identification of anatomical landmarks and differentiate normal from abnormal findings for client's developmental stage and culture. Areas to cover include</i>		
❖ GENERAL APPEARANCE AND OBSERVATIONS (10 points/1 point each) Appearance, grooming and hygiene Apparent age Odors Nutritional status Level of consciousness Speech Affect Gait and posture Presence of abnormal movements and/or gross deformities Signs of distress		
❖ INTEGUMENTARY (12 points/6 point each) Inspect color and for the presence of lesions the exam throughout the exam. Palpate for temperature, turgor and texture throughout the exam.		
❖ HEENT (18 points/2 point each) Visually inspect the head and scalp noting size, shape, symmetry, position, hair distribution, nits and visible lesions. Palpate scalp for abnormalities, tenderness and hair texture. Visually inspect ears for lesions or drainage and palpate the mastoid area behind the ears for tenderness. Palpate both sides of the neck for palpable and/or tender lymph nodes. Inspect the eyes for redness or drainage. Assess the cardinal positions of gaze. Use a penlight to assess pupil size, symmetry and response to light. Inspect the nose for drainage and patency of each nare. Ask client to open mouth and inspect gums for moisture and pink color. Inspect teeth for general condition. Note abnormal odors. Ask client to move tongue for symmetry. Use a penlight to inspect the uvula, palate and pharynx. A tongue depressor may be used to Assess for a gag reflex. Palpate and auscultate carotid and jugular veins noting abnormal sounds and distention.		

CRITERIA	Performance	Comments
❖ CHEST (14 points/2 point each) Note curvature of spine and shape and size of chest. Inspect chest for symmetrical movement. Note rate and quality of respirations. Use stethoscope to auscultate first the anterior chest, then posterior chest (go side to side). Auscultate heart sounds (aortic, pulmonic, tricuspid and mitral) using APTM mnemonic. Listen with both bell and diaphragm. Note rate and rhythm, and irregularities or extra heart sounds. Note point of maximal impulse/intensity (or PMI) Inspect symmetry and appearance of breast tissue.		
❖ ABDOMEN (12 points/2 point each) Establish that client has emptied bladder prior to examination. Assist the client into a supine position with the knees raised. Visually inspect the abdomen for discolorations, lesions or scars, abdominal distention, bladder distention and/or the presence of herniations. Note shape, size, symmetry and movements (respirations, pulsations, peristalsis). Establish date of last bowel movement, ask about pattern, characteristics of stool or problems associated with bowel elimination. Auscultate for vascular sounds. Perform auscultation by listening in all four quadrants of the abdomen. Note the presence of normo-active, hypoactive or hyperactive bowel sounds. <i>If no sounds are heard, listen for five minutes in all four quadrants before documenting absence of bowel sounds.</i> Lightly palpate the abdomen for masses or tenderness. <i>Never palpate the abdomen if it is rigid or bruits are heard.</i>		
❖ EXTREMITIES (20 points/2 point each) Check nails for clubbing or other abnormalities. Rate capillary refill. Palpate and rate brachial and radial pulses. Assess for symmetry and rate muscle strength of both upper extremities. Assess hand grip. Inspect the extremities for deformities or edema. Note condition of feet and toenails, noting any abnormalities. Assess range of motion in the fingers, wrists, elbows, shoulders, ankle, knee and hip. Palpate and rate pedal pulses (dorsalis pedis and posterior tibialis). Assess for symmetry and rate muscle strength of both lower extremities. Assess length and circumference of both lower extremities noting any discrepancies. Assess for Homan's sign. If client is able to stand/ambulate without risk, assess gait and balance.		
❖ EXTERNAL GENITALIA/RECTUM (4 points) Inspect and palpate external genitalia. Note any discharge, lesions, masses or abnormal assessment findings.		

Skills Demonstration Example for Parenteral Medication Administration

Directions: Students will use their own supplies. Review the MAR and medication available from pharmacy. Calculate the correct dose and prepare the medication. Identify the bony landmarks and name the muscle you are injecting the medication into. Administer the medication to your client. For purposes of this activity, assume it is 0800.

Site to be used: Ventrogluteal

Z-track? YES

FSBS Results: 281 mg/dL

AnyHospital, USA Where your Health and Learning Matter 7777 South May Avenue Oklahoma City, Oklahoma 73159				
Date: <u>Today's Date</u>				
Physician: Dr. James Brown Allergies: NKDA Reason for visit: R TKR Admitted : Recently		Patient Room #: 167	Name: Lott, Mona Medical Record #: 800008234 Financial #: 800008234 Birthdate: 09/21/1951	
Height:	Weight:	Age:	Sex:	
		Medication Check: Yes:		
<input type="checkbox"/> PRN Medication		<input type="checkbox"/> Routine Medications		Site Code/Omitted Doses/Effectiveness/Relief
	Start/Stop	2400-0700	0701-1500	1501-2359
18 Units NPH Insulin SC every AM	Today/Sometime in the future		0800	
Sliding Scale Insulin (Regular) < 150 = 0 units; 151-199 = 3 units; 200-249 = 6 units; 250-299 = 9 units; 300 or > = Call MD for orders	Today/Sometime in the future		0800	
Ativan 3mg IM now and every six hours as needed for agitation. Hold for sedation.	Today/Sometime in the future		0800	

Math Competency Plan Information and Resources

Transfer Student Math Competency Plan Information and Resources

The importance of math competence for safe nursing practice is undisputable. Registered nurses use math skills to solve dosage calculation issues; to underscore other clinical issues; and in client management decisions. Recent safety and quality alerts and recommendations/positions from the Joint Committee on Accreditation of Healthcare Organizations (JCAHO) and the Institute for Safe Medication practices (ISMP) provide further validity to the essential math competencies which OCCC nursing graduates must have. In that light, the nursing program has developed this plan.

The medication administration competency plan for the core nursing courses includes that:

- I. Each core nursing major course (NUR 1519, NUR 1529, NUR 2539, and NUR 2549) has medication administration instruction, practice opportunities, and evaluation of dosage calculation competency as follows:
 - a. NUR 1519 Nursing Process I will include
 1. Curriculum content related to general principles of administering medications safely (to include reconstitution of medications);
 2. Instruction and evaluation of safe practice requirements to include The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) policies and safety goals for medication administration, sentinel events and client safety (e.g. "do not use" list of abbreviations);
 3. Emphasis will be placed on oral medications, topical medications; enteral medications; and parenteral medications excluding IVs or central lines;
 4. Dosage calculation practice exam(s)/session(s) at the beginning of the course.
 5. Assessment of dosage calculation competency through the administration of a dosage calculation exam and additional dosage calculation questions to be included in each unit/final exam.
 - b. NUR 1529 Nursing Process II will include content from NUR 1519 and
 1. Curriculum content related to general principles establishing/maintaining peripheral IV sites; infusion methods (to include administering medications through intravenous push/bolus; infusion methods using piggyback techniques to primary tubing sets); fluid container; administration sets; tubing components; gravity infusions, including calculating drops/minute; drop factor constant; and calculating total infusion times;
 2. Instruction and evaluation of competency in infusion methods using piggyback techniques and push/bolus techniques
 3. Dosage calculation practice exam(s)/session(s) at the beginning of the course.
 4. Assessment of dosage calculation competency through the administration of a dosage calculation exam and additional dosage calculation questions to be included in each unit/final exam.

- c. NUR 2539 Nursing Process III will include content from NUR 1519, NUR 1529 and
 - 1. Curriculum content related to general principles in administering medications/fluid/blood components through peripheral lines and central lines;
 - 2. Instruction and evaluation of competency in using/maintaining central lines safely.
 - 3. Dosage calculation practice exam(s)/session(s) at the beginning of each course.
 - 4. Assessment of dosage calculation competency through the administration of a dosage calculation exam and additional dosage calculation questions to be included in each unit/final exam.
- d. NUR 2549 Nursing Process IV will include
 - 1. Curriculum content related to general principles in administering medications utilizing all methods of administration outlined in NUR 1519, NUR 1529 and NUR 2539.
 - 2. Evaluation of competency to include JCAHO policies and safety goals for medication administration, sentinel events, client safety and administering medications utilizing all methods of administration outlined in NUR 1519, NUR 1529 and NUR 2539.
 - 3. Dosage calculation practice exam(s)/session(s) at the beginning of the course
 - 4. Assessment of dosage calculation competency through the administration of a dosage calculation exam and additional dosage calculation questions to be included in each unit/final exam.

II. Instructional Methods for each core nursing course may include

- a. Lab instruction, peer practice (no invasive skills allowed without faculty supervision), and faculty supervised lab practice
- b. Clinical practice (faculty and/or staff RN supervision required)
- c. Reading assignments from required and recommended textbook sources
- d. Podcasts and/or other online instructional resources
- e. Computer assisted instructional resources available in computer lab
- f. DVDs available from Library
- g. Tutoring sessions with nursing faculty
- h. Remediation recommendations to College Math Lab
- i. Peer tutoring

III. Dosage Calculation assessment methods for each core nursing course will include:

- a. Administration of a maximum of 4 dosage calculation exams (20 questions each) which test for safe course outcomes as designated. The dosage calculation exams will not include multiple choice items. The dosage calculation exams will be scheduled in the first two weeks of the course in NUR 1519, NUR 1529, NUR 2539 and NUR 2549 (Traditional and Career Ladder Pathway). Students enrolled in BADNAP will have exams scheduled in the first two weeks of NUR 1519 and in the first week of NUR 1529, NUR 2539 and NUR 2549. *Students must achieve a minimum score of 95% by the fourth exam to progress in the course, including the clinical experiences required to meet course objectives. Students must meet the competency requirements before administering medications in the clinical setting. If the student does not reach the 95% required score by the fourth exam, the student will have the option of withdrawing from the course or will not be allowed to participate in required clinical experiences, which will result in a failing course grade.*
- b. In addition to the specific dosage calculation exams in each core nursing course, dosage calculation problems will be incorporated into course exams (unit and final exams). A minimum of one (1) to two (2) medication administration items will be included on each exam. Additional dosage calculation questions may be added at the faculty's discretion.

November, 2008
Revised April, 2010
Revised March, 2014

Important!

The approved rounding rules, abbreviations, etc. for the OCCC Nursing Program is included in this packet. Please ensure you refer to this information to be successful on the dosage calculation competency exam.

Website tutorials are not endorsed by the OCCC Nursing Program and/or OCCC. The OCCC rounding rules as listed in the Math Packet apply to our exams – answers on the websites may differ. Use these resources only as a source of additional practice problems.

Acceptable Abbreviations

Abbreviation	Meaning	Abbreviation	Meaning
pc	after meals	IM	intramuscular
ac	before meals	IV	intravenous
po	by mouth	kg or Kg	kilogram
cap	capsule	liq	liquid
C°	Celsius	l or L	liter
cm	centimeter	m	meter
c	Cup	mcg	microgram
dr	dram	mEq	milli-equivalent
gtt	Drop	mg	milligram
q12h	every 12 hours	mm	millimeter
q 2h	every 2 hours	min or m	minims
q 3h	every 3 hours	mL	milliliters
q 4h	every 4 hours	oz	ounce
q 6h	every 6 hours	OTC	over-the-counter
q 8h	every 8 hours	pt	pint
q hr	every hour	lb	pound
F°	Fahrenheit	pwdr	powder
fl	fluid	qt	quart
fl dr	fluid dram	PR	rectally
fl oz	fluid ounces	SC or SQ	subcutaneous
qid	four times a day	T, Tbs, Tbsp	tablespoon
gr	grain	tab	tablet
g, gm, G or Gm	gram	t, tsp	teaspoon
½ or ss	half	TID	three times a day
hs	hour of sleep	BID	twice a day
stat	immediately, at once		
ID	intra dermal		

The Do Not Abbreviate List

Write out the following	Reason for Not Using
daily	do not write QD, Q.D., q.d., qd
greater than	do not write >, misinterpreted as the number 7
less than	do not write <, misinterpreted as the letter L
at	do not write @, mistaken for the number "2"
every other day	do not write QOD
milliliters or mL	do not write cc, mistaken for U when written poorly
mcg or micrograms	do not write µg, mistaken for mg resulting in one thousand-fold overdose
units	do not write u mistaken for "o", number "4" or "cc"
International Unit	do not write IU mistaken for "IV" or the number "10"
X mg	do not write trailing zero (X.0 mg) Decimal point is missed
0.X mg	do not miss writing the leading zero (.X), decimal point is missed
Morphine sulfate Magnesium sulfate	do not write MS, confusion, can mean morphine sulfate or magnesium Sulfate; do not write MSO ₄ or MgSO ₄ , confused for one another
Reference: www.jcaho.org (JCAHO Do Not Use List)	

Tips and Tricks for Calculations

1. Memorize the metric, apothecary and household equivalents.
2. Analyze the problem before beginning calculation.
3. Always place a zero in front of a decimal, not after the decimal.
4. Write neatly.
5. Estimate and prove each step, Ask yourself – is this a *REASONABLE* amount of medication? (E.g. you will NOT be giving 100 tabs when in clinical/practice or on a test question!)
6. If you doubt your answer – recalculate!

The Rounding Rules

Basic Rounding: (Applies to both Adult & Pediatric clients):

If the number is greater than or equal to 5 then round up. If the number is less than 5 then round down.

Ex: 1.57 = 1.6 Ex: 2.43 = 2.4

Ex: 0.782 = 0.78 Ex: 0.968 = 0.97

Remember: Round at the end of the problem.

Converting pounds and kilograms

Round at the end of the problem.

Ex: DrugX 15mg/Kg per day. Patient weight is 82 lbs.

$82 \text{ lb} \times \frac{1 \text{ kg}}{2.2 \text{ lb}} = 37.27 \text{ kg}$

$37.27 \text{ kg} \times 15 \text{ mg/kg} = 559.05 \text{ mg}$

Answer 559.1mg

** See instructions for how to round tablets if calculating oral/enteral dose

Drops (gtt) and Units

Drops and units are too small to divide into parts.

Cannot give $\frac{1}{2}$ a drop

Always round to the nearest whole number.

Ex: 89.5 = 90

Ex: 77.4 = 77

mL

If the answer is less than 1 mL then round to the nearest 100th

Ex: 0.376 = 0.38 mL

If the answer is greater than 1 then round to the nearest tenth.

Ex: 1.57 = 1.6 mL

Tablets

Tablets as a rule, can only be given whole or broken in half (if scored). Round to the half (0.5):

Ex: 1.45 = 1.5 tablets

Ex: 1.1 = 1 tablet

Conversion Table

Metric Units of Measurement			
Gram (Weight)	1 kilogram (kg, Kg)	1000 g	
	1 gram (g, gm, G, Gm)	1000 mg	0.001 g
	1 milligram (mg)	1000 mcg	
Liter (volume)	1 liter (L, l)	1000 mL	
Household Equivalents in Fluid volume			
1 measuring cup =		8 ounces (oz)	
1 medium-size glass (tumbler size) =		8 ounces (oz)	
1 coffee cup (c) =		6 ounces (oz)	
1 ounce (oz) =		2 tablespoons (T)	
1 tablespoon (T) =		3 teaspoons (t)	
1 teaspoon (t) =		60 drops (gtt)	
1 drop (gt) =		1 minim (min, or m)	
Approximate Metric, Apothecary, and Household Equivalents			
Metric System	Apothecary System	Household System	
1 kilogram (kg)	2.2 pounds (lb)	2.2 pounds (lb)	
1000 gram (g)	2.2 pounds (lb)		
	1 pound (lb)	16 ounces (oz)	
60 milligram (mg)	1 grain (gr)		
240 milliliter (mL)		1 cup	
15 mL		1 tablespoon (T)	
5 mL		1 teaspoon (t)	

Dosage Calculation Tutorials and Information

(Please note that OCCC is not responsible for content and/or endorse the following websites.)

Calculation Tools

Clinicians Ultimate Guide to Drug Therapy - <http://www.globalrph.com>

This website provides drug information, intravenous drug dilution standards and online clinical dosing calculators for health care professionals.

Body Surface Area Calculator - <http://www.halls.md/body-surface-area/bsa.htm>

This website contains a tool to calculate body surface area (BSA), with advanced features such as automatic units conversion. This can be used for medication dose calculations.

Nursing Formulas and Conversions - <http://www.nurse-center.com/studentnurse/nur11.html>

This webpage has a list of useful metric conversion tables.

Video Tutorials

Med math Study Review for RN Nurses and Paramedics -

<http://www.youtube.com/watch?v=JWMCjCYAap8&feature=related>

McLennan Community College Dimensional Analysis for the Beginning Nursing Student -

http://www.youtube.com/watch?v=zDWVNjE9I_Y

Study Aids and Websites with Tutorials and Practice Tests

Drug Calculations Quiz Page - <http://www.testandcalc.com/quiz/index.asp>

This webpage has online quizzes covering metric conversions, tablet dosage calculations, fluid dosage calculations, and IV drip rate calculations.

Med-Calculator from Merlot - http://www.m2hnursing.com/MedCal/module1_1.php An interactive multimedia tutorial for healthcare professionals wishing to refresh math skills and learn how to calculate medication dosages and IV rates (good for review for NP II math competency exams!)

Drug Calculations for Nurses from Merlot - <http://www.unc.edu/~bangel/quiz/quiz5.htm>

This site provides a tutorial for nursing students on basic drug calculations.

Drug Dose Calculations from Merlot - <http://www.nottingham.ac.uk/~ntzndeh/mathpack.pdf>

Drug dosage calculations is 10-page tutorial that reviews the rationale for drug calculations, and metric system abbreviations and conversion factors. It includes 4-sets of questions and answers. This resource was developed by faculty at the University of Nottingham School of Nursing.

Drug Calculation Tutorial from Merlot - http://www.siue.edu/nursing/slchs/pdf/drug_calculation_tutorial_091407.pdf

This learning resource is a 13-page PDF file with a review of the essential information for calculating medication dosages. It includes a basic math review, different formulas, along with tips understanding drug dose test questions.

Dosagehelp.com - <http://www.dosagehelp.com/>

This website provides dosage calculations tutorials, complete with explanations and examples.

Calculating Drug Dosages - An Interactive Approach to Learning Nursing Math (FADavis)

http://davisplus.fadavis.com/castillo/syringe_exercises.cfm

Offers students practice with calculating drug dosages when using a syringe

Calculating Drug Dosages - An Interactive Approach to Learning Nursing Math (FADavis)

http://davisplus.fadavis.com/castillo/review_questions.cfm

Offers students the opportunity to complete two practice quizzes

Medication Math for the Nursing Student - <http://www.alysion.org/dimensional/analysis.htm>

Has just about everything you could ask for...

Nurse CEU online course for dimensional analysis - <http://www.nurseceusonline.com/viewcourse/20-63129-p.htm>

Purplemath - <http://www.purplemath.com/modules/index.htm>

Basic math and problems if you need assistance with these types of problems

Medical Mathematics Tutorial for Student Nurses - <http://becps.net/>

This web based medical mathematics tutorial, based on medications and calculations outlined by Kee and Hayes (2003), will assist the student nurse to gain proficiency and accuracy calculating drug dosages from word problems.

Oklahoma City Community College

NUR 1519 Sample Dosage Calculation Practice Exam

1. 65 mg= _____ g
2. 500 mcg= _____ mg
3. 7.16 Kg= _____ g
4. 9 Kg= _____ lbs
5. 2 ½ oz= _____ mL
6. 13 t= _____ mL
7. 250 lbs= _____ Kg
8. ½ gr= _____ mg
9. 4 T = _____ mL
10. 125 mL= _____ L

11. The order reads: Levothroid 0.075 mg PO every day

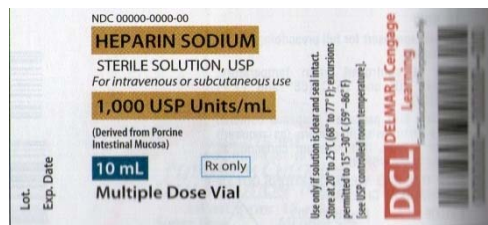
The available dose is indicated by the label below.



How much medication will the nurse administer for 1 dose? _____

12. The order reads: Heparin 650 units SC q 12h

The available dose is indicated by the label below.



How much medication will the nurse administer for 1 dose? _____

13. The order reads: Depo-Provera 1 g *IM stat*.

The available dose is indicated by the label below.



How much medication will the nurse administer for 1 dose? _____

14. The order reads: Clonazepam 1.5 mg PO every day

The available dose is indicated by the label below.



How much medication will the nurse administer for 1 dose? _____

15. The order reads: Morphine Sulfate gr ¼ IM q 4-6hrs, pain.

The available dose is indicated by the label below.



How much medication will the nurse administer for 1 dose? _____

16. The order reads: Cefaclor 20 mg/kg/dose PO TID.

Weight of child 24 lbs

The available dose is indicated by the label below.



How much medication will the nurse administer for 1 dose? _____

17. The order reads: Epinephrine 200 mcg subcut stat

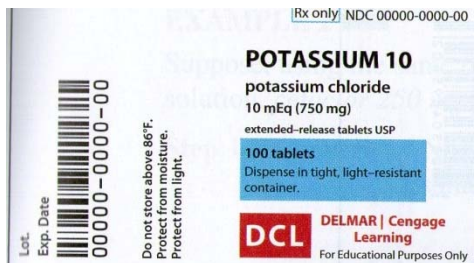
The available dose is indicated by the label below.



How much medication will the nurse administer for 1 dose? _____

18. The order reads: Potassium 15 mEq PO every day

The available dose is indicated by the label below.



How much medication will the nurse administer for 1 dose? _____

19. The order reads: Biaxin 500mg PO q 12hrs.

The available dose is indicated by the label below.



How much medication will the nurse administer for 1 dose? _____

20. The order reads: Terbutaline 250 mcg subcut stat and repeat q. 15-30 min if no significant improvement in status asthmaticus

The available dose is indicated by the label below.



How much medication will the nurse administer for 1 dose? _____

Answers:

- 1) 0.065
- 2) 0.5
- 3) 7160
- 4) 19.8
- 5) 75
- 6) 65
- 7) 113.6 *OR* 113.64
- 8) 30
- 9) 60
- 10) 0.125 *OR* 0.13
- 11) 3 tablets/tabs
- 12) 0.65 mL (remember if less than 1 mL round to 100th)
- 13) 2.5 mL
- 14) 3 tablets/tabs
- 15) 1 mL
- 16) 5.8 mL
- 17) 0.2 mL
- 18) 1.5 tablets/tabs
- 19) 2 tablets/tabs
- 20) 0.25 mL