



**Alabama  
Department of  
Postsecondary Education**  
**Representing the Alabama Community College System**

Updated 9/5/08

**NUR 105**

**Adult Nursing**

**Plan of Instruction**

**Effective Date: 2008**

**Version Number: 2008-1**

**COURSE DESCRIPTION**

This course provides opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Emphasis is placed on providing care to individuals undergoing surgery, fluid and electrolyte imbalance, and common alterations in respiratory, musculoskeletal, gastro-intestinal, cardiovascular, and endocrine systems. Nutrition, pharmacology, communication, cultural, and community concepts are integrated.

**CREDIT HOURS**

Theory	5 credit hours
Lab	1 credit hour
Clinical	2 credit hours
Total	8 credit hours

**Total contact hours 14**

**NOTE:** Theory credit hours are a 1:1 contact to credit ratio. Lab credit is 3:1. Clinical credit is 3:1.

**PREREQUISITE COURSES**

- NUR 102 – Fundamentals of Nursing
- NUR 103 – Health Assessment
- NUR 104 – Introduction to Pharmacology
- NUR 106 – Maternal and Child Nursing
- BIO 201 – Human Anatomy and Physiology I
- Math requirement

**CO-REQUISITE COURSES**

- NUR 106 – Maternal and Child Nursing
- ENG 101 – English Composition I
- BIO 202 – Human Anatomy and Physiology II

**SUMMARY OF CHANGES:**

Module G – removed reference to NG tubes from Clinical/Lab Skills

**INSTRUCTIONAL GOALS**

- **Cognitive** - Comprehend foundational knowledge of providing health care for adult clients.
- **Performance** - Apply foundational knowledge of providing health care for adults.

**PROFESSIONAL COMPETENCIES/OBJECTIVES**

Unless otherwise indicated, evaluation of student's attainment of cognitive and performance objectives is based on knowledge and skills gained from this course. Competencies specified for each module may be set by certification agencies, national and state codes, health care facility policies, locally developed lab/clinical assignments, or any combination. Students are expected to utilize relevant technology for client care and documentation.

**PROFESSIONAL COMPETENCIES**

- Promote fluid and electrolyte homeostasis.
- Promote acid-base homeostasis.
- Perform IV therapy.
- Obtain blood specimens.
- Provide perioperative care.
- Provide care for clients with respiratory system alterations.
- Provide care for clients with selected cardiovascular system alterations.
- Provide care for clients with selected endocrine system alterations.
- Provide care for clients with selected gastro-intestinal system alterations.
- Provide care for clients with musculo-skeletal system alterations.

<b>MODULE A – FLUID, ELECTROLYTE, AND ACID-BASE HOMEOSTASIS</b>		
<b>PROFESSIONAL COMPETENCIES</b>	<b>PERFORMANCE OBJECTIVES</b>	<b>KSA Indicators</b>
A1.0 Promote fluid and electrolyte homeostasis.	Given various scenarios and clinical settings: A1.1 Assess a client to determine fluid and electrolyte homeostasis.	2c
	A1.2 Use the nursing process to promote fluid and electrolyte homeostasis.	2c
A2.0 Promote acid-base homeostasis.	Given various scenarios and clinical settings: A2.1 Assess a client to determine acid-base homeostasis.	2c
	A2.2 Use the nursing process to promote acid-base homeostasis.	2c
<b>LEARNING OBJECTIVES</b>		
A1.1.1	Define terms associated with fluid and electrolyte homeostasis.	A
A1.1.2	Explain the physiology of fluids and electrolytes.	B
A1.1.3	Explain how the body's regulators systemically maintain homeostasis.	B
A1.1.4	Identify causes of fluid and electrolyte imbalance.	B
A1.1.5	Interpret clinical manifestations to determine types of fluid and electrolyte imbalance.	D
A1.1.6	Identify treatment modalities for maintaining fluid and electrolyte homeostasis.	B
A1.1.7	Evaluate outcomes of treatment modalities for maintaining fluid and electrolyte homeostasis.	D
A2.1.1	Define terms associated with acid-base homeostasis.	A
A2.1.2	Explain the physiology of acids and bases.	B
A2.1.3	Explain how the body's regulators systemically maintain homeostasis for acid-base.	B
A2.1.4	Identify causes of acid-base imbalance.	B
A2.1.5	Interpret clinical manifestations to determine types of acid-base imbalance.	D
A2.1.6	Identify treatment modalities for maintaining acid-base homeostasis.	A
A2.1.7	Evaluate outcomes of treatment modalities for maintaining acid-base homeostasis.	D
<b>CLINICAL/LAB SKILLS</b>		
<ul style="list-style-type: none"> <li>• Use relevant technology for care and documentation</li> <li>• Interpret lab data</li> <li>• Measure and calculate input and output data</li> <li>• Obtain anthropometric measurements</li> <li>• Obtain weights</li> <li>• Perform appropriate assessments</li> <li>• Interpret assessment findings</li> </ul>		

**MODULE A OUTLINE**

- Fluid and electrolyte homeostasis
  - Functions of fluids and electrolytes
  - Transports
    - Active
    - Passive
  - Regulators
- Disturbances in fluid and electrolyte balance
  - Causes of imbalance
  - Alterations
    - Dehydration
    - Fluid volume excess
    - Hyper/Hypo electrolyte disturbances
  - Nursing Process
- Acid-base homeostasis
  - Blood gases
  - Regulators
- Acid-base alterations
  - Causes of imbalance
  - Respiratory acidosis/alkalosis
  - Metabolic acidosis/alkalosis
- Nursing process

<b>MODULE B – VENIPUNCTURE AND INTRAVENOUS (IV) THERAPY</b>		
<b>PROFESSIONAL COMPETENCIES</b>	<b>PERFORMANCE OBJECTIVES</b>	<b>KSA Indicators</b>
B1.0 Perform venipuncture and IV therapy.	Use the nursing process to: B1.1 Perform venipuncture. B1.2 Initiate intravenous therapy. B1.3 Maintain intravenous therapy.	2c 2c 2c
B2.0 Obtain blood specimens.	Use the nursing process to: B2.1 Collect blood specimens. B2.2 Handle blood specimens according to policy and protocol.	2c 2c
<b>LEARNING OBJECTIVES</b>		
B1.1.1 Define terms associated with IV Therapy.		A
B1.1.2 Describe key points of the Nurse Practice Act concerning intravenous therapy.		B
B1.1.3 Explain CDC guidelines and agency policies for intravenous therapy.		C
B1.1.4 Explain selected concepts of ethics and patient's rights related to intravenous therapy.		C
B1.1.5 Differentiate between the registered and practical nurse's responsibilities for intravenous therapy.		C
B1.1.6 Explain the registered and practical nurse's responsibilities in administration of blood, blood products, and volume expanders.		C
B1.1.7 Interpret doctor's orders for intravenous therapy.		D
B1.1.8 Explain the anatomical and physiological considerations associated with intravenous therapy.		B
B1.1.9 Explain rationale for the selection of intravenous solutions.		D
B1.1.10 Describe the purpose of equipment and supplies for intravenous therapy.		B
B1.1.11 Select appropriate equipment and supplies for specified intravenous therapy.		C
B1.1.12 Describe the process of preparing a patient for intravenous therapy.		c
B1.1.13 Describe the process of preparing the equipment for performing intravenous therapy.		c
B1.1.14 Calculate IV flow rates.		C
B1.1.15 Describe the process of starting the intravenous therapy.		c
B1.2.1 Describe the process of managing intravenous therapy including IV piggyback and saline flush.		c
B1.3.1 Identify expected outcomes of treatment modalities for IV Therapy.		B
B1.3.2 Use critical thinking to prioritize management of care for clients receiving selected IV Therapy.		D
B2.1.1 Identify equipment and techniques for collecting blood specimens.		a
B2.1.2 Select the appropriate color collection tube for an ordered diagnostic test based on organizational protocol.		C
B2.1.3 Describe the process of preparing a patient for collecting blood specimens.		c
B2.1.4 Explain the process for obtaining blood specimens.		c
B2.2.1 Explain CDC guidelines and/or agency policies for handling blood specimens.		C
B2.2.2 Explain the procedures for handling and disposing of specimen gathering materials.		c

**MODULE B LEARNING OBJECTIVES (continued)****CLINICAL/LAB SKILLS**

- Use relevant technology care and documentation
- Perform venipunctures
- Manage IV therapy including IVPBs and flush
- Document
- Obtain blood specimens
- Handle and dispose of IV therapy and blood specimen materials

**MODULE B OUTLINE**

- Roles and responsibilities
  - Legal and ethical guidelines
    - Nurse Practice Act
    - CDC guidelines
    - Handling medical waste
    - Agency policies
    - Ethics and patient's rights
  - Interpreting doctor's orders
- Terminology and A&P review
- Types and use of intravenous solutions
- Equipment and supplies
  - Pumps and controllers
  - Tubing and filters
  - IV needles and catheters
  - Criteria for choosing the appropriate equipment
- Calculating flow rates
- Patient physical and psychological preparation for IV therapy
- Venipuncture process
  - Techniques
  - Securing the IV site
  - Dressings and labeling
- Flow rate problems
- IV Complications and problems
  - Local
  - Systemic
- Monitoring and maintenance of the IV
  - Documentation
  - Site care
  - Patient education
- IV medications
  - Continuous
  - Intermittent
- Blood, blood products, and volume expanders
  - Registered nurse responsibilities
  - Practical nurse responsibilities
  - Transfusion reactions
- Nursing process

<b>MODULE C – PERIOPERATIVE CARE</b>		
<b>PROFESSIONAL COMPETENCIES</b>	<b>STUDENT PERFORMANCE OBJECTIVES</b>	<b>KSA Indicators</b>
C1.0 Provide perioperative care.	C1.1 Given clinical situations use the nursing process to provide perioperative care.	2c
	C1.2 Develop a nursing care plan to provide perioperative care.	2c
	C1.3 Evaluate the effectiveness of perioperative care.	2c
<b>LEARNING OBJECTIVES</b>		
C1.1.1	Define terms associated with perioperative care.	A
C1.1.2	Explain the nurse's role within perioperative settings.	C
C1.1.3	Explain the elements of informed consent.	B
C1.1.4	Explain nursing process for perioperative care.	c
C1.1.5	Explain preoperative care.	c
C1.1.6	Explain intraoperative care.	c
C1.1.7	Explain postoperative care.	c
C1.1.8	Describe techniques for acute pain management.	c
C1.1.9	Use critical thinking to prioritize management of care.	D
<b>CLINICAL/LAB SKILLS</b>		
<ul style="list-style-type: none"> <li>• Use relevant technology for care and documentation</li> <li>• Complete the preoperative checklist</li> <li>• Prep clients for surgery</li> <li>• Surgical gowning and gloving</li> <li>• Surgical scrubbing</li> <li>• Maintain a sterile field</li> <li>• Post anesthesia recovery care and documentation</li> <li>• Sterile and clean dressing</li> <li>• Wound assessment</li> <li>• Pain management</li> <li>• Thromboembolytic Device (TED)</li> <li>• Sequential Compression Devices (SCD's)</li> <li>• Incentive Spirometry</li> <li>• Turn-cough-and deep breath (TCDB)</li> <li>• Common drainage devices</li> </ul>		

**MODULE C OUTLINE**

- Nurses role within perioperative settings
- Informed consent
- Pre-operative
  - Legal considerations
  - Types of surgery
  - Risk factors
  - Diagnostic tests and exams
  - Complete preoperative checklist
  - Prep for surgery
  - Nursing process
- Intraoperative
  - Surgical Gowning and gloving
  - Surgical scrub
  - Holding area
  - Operative area
    - Maintaining a sterile field
    - Safety
    - Types of Anesthesia
    - Malignant hyperthermia
- Post-operative
  - Complications
  - Wound classification and healing
  - Recovery area
    - Post anesthesia recovery
  - Nursing process
  - Pain management
    - Epidurals
    - Patient Controlled Analgesia (PCA's)
  - Shock
  - Pharmacology



<b>MODULE D – RESPIRATORY SYSTEM ALTERATIONS</b>		
<b>PROFESSIONAL COMPETENCIES</b>	<b>PERFORMANCE OBJECTIVES</b>	<b>KSA Indicators</b>
D1.0 Care for clients with respiratory system alterations.	D1.1 Assess a client for selected respiratory system alterations.	2c
	D1.2 Develop a nursing care plan to provide care for a client with selected respiratory system alterations.	2c
	D1.3 Implement a nursing care plan to provide care for a client with selected respiratory system alterations.	2c
	D1.4 Evaluate the effectiveness of interventions for a client with respiratory system alterations.	2c
<b>LEARNING OBJECTIVES</b>		
D1.1.1	Explain the anatomy and physiology of respiratory system.	A
D1.1.2	Define terms associated with the respiratory system.	A
D1.1.3	Describe diagnostic tests for respiratory system alterations.	B
D1.1.4	Describe upper respiratory system alterations.	B
D1.1.5	Describe lower respiratory system alterations.	B
D1.1.6	Describe respiratory failure for adult clients.	B
D1.1.7	Interpret clinical manifestations to determine necessary care for respiratory system alterations.	C
D1.2.1	Describe the process of tracheotomy care, suctioning, and chest physiotherapy.	c
D1.2.2	Describe the pharmacological agents for respiratory system alterations.	C
D1.2.3	Describe nutritional considerations for treating respiratory system alterations.	C
D1.3.1	Describe the process for implementing a nursing care plan to treat respiratory system alterations.	c
D1.4.1	Identify expected outcomes of treatment modalities for respiratory system alterations.	C
D1.4.2	Use critical thinking to prioritize management of care.	D
<b>CLINICAL/LAB SKILLS</b>		
<ul style="list-style-type: none"> <li>• Use of relevant technology for client care and documentation</li> <li>• Trach care and suctioning</li> <li>• Chest physiotherapy</li> <li>• Respiratory assessment</li> <li>• Metered-dose inhalers (MDI)</li> <li>• Nebulizers</li> <li>• Maintaining Oxygenation</li> <li>• Peak flow monitor</li> <li>• Pulse oximetry</li> <li>• Ambu bag</li> <li>• Responding to codes</li> </ul>		

**MODULE D OUTLINE**

- Terminology and A& P review
- Diagnostic tests
- Alterations
  - Upper
    - Acute
    - Chronic
  - Lower
    - Acute
    - Chronic
  - Respiratory Failure
    - Adult Respiratory Disorder Syndrome (ARDS)
- Tracheotomy care and suctioning
- Chest physiotherapy
- Nursing process
- Pharmacological agents
- Nutritional considerations

**MODULE E – CARDIOVASCULAR SYSTEM ALTERATIONS**

<b>PROFESSIONAL COMPETENCIES</b>	<b>PERFORMANCE OBJECTIVES</b>	<b>KSA Indicators</b>
E1.0 Care for clients with selected cardiovascular system alterations.	E1.1 Assess a client to determine selected cardiovascular system alterations.	2c
	E1.2 Develop a nursing care plan to treat selected cardiovascular system alterations.	2c
	E1.3 Implement a nursing care plan to treat selected cardiovascular system alterations.	2c
	E1.4 Evaluate the effective of interventions to treat selected cardiovascular system alterations.	2c
<b>LEARNING OBJECTIVES</b>		
E1.1.1	Explain the anatomy and physiology of cardiovascular system.	A
E1.1.2	Define terms associated with the cardiovascular system	A
E1.1.3	Describe diagnostic tests for selected cardiovascular system alterations and complications.	B
E1.1.4	Describe selected cardiovascular system alterations and complications.	B
E1.1.5	Interpret clinical manifestations to determine selected cardiovascular system alterations and complications.	C
E1.2.1	Describe the pharmacological agents for selected cardiovascular system alterations and complications.	C
E1.2.2	Describe nutritional considerations for treating selected cardiovascular system alterations and complications.	C
E1.2.3	Describe the nursing process for providing care for selected cardiovascular system alterations and complications.	C
E1.3.1	Describe the process for implementing a nursing care plan to treat selected cardiovascular system alterations.	c
E1.4.1	Identify expected outcomes of treatment modalities of selected cardiovascular system alterations and complications.	C
E1.4.2	Use critical thinking to prioritize management of care.	D
<b>CLINICAL/LAB SKILLS</b>		
<ul style="list-style-type: none"> <li>• Use of relevant technology for client care and documentation</li> <li>• Cardiovascular assessment</li> <li>• Circulation, movement, and sensation assessment (CMS) <ul style="list-style-type: none"> <li>– Pulselessness</li> <li>– Pallor/Temperature</li> <li>– Pain</li> <li>– Edema</li> <li>– Paresthesia</li> <li>– Paralysis</li> </ul> </li> <li>• Interpreting diagnostic data</li> <li>• Diagnostic and monitoring equipment</li> <li>• Apical pulse</li> <li>• Thromboembolytic Device (TED)</li> <li>• Sequential Compression Devices (SCDs)</li> </ul>		

### **MODULE E OUTLINE**

- Terminology and A& P review
- Diagnostic tests
- Alterations and complications
  - Hypertension
  - Peripheral Vascular Alterations (PVD)
    - Arterial and venous ulcers
  - Anemia
  - Hematological
  - Pulmonary embolus
  - Congestive heart failure
  - Aneurysms
- Nursing process
- Pharmacological agents
- Nutritional considerations

<b>MODULE F – ENDOCRINE SYSTEM ALTERATIONS</b>		
<b>PROFESSIONAL COMPETENCIES</b>	<b>PERFORMANCE OBJECTIVES</b>	<b>KSA Indicators</b>
F1.0 Care for clients with selected endocrine system alterations.	F1.1 Assess a client to determine selected endocrine system alterations.	2c
	F1.2 Develop a nursing care plan to treat selected endocrine system alterations.	2c
	F1.3 Implement a nursing care plan to treat selected endocrine system alterations.	2c
	F1.4 Evaluate the effective of interventions to treat selected endocrine system alterations.	2c
<b>LEARNING OBJECTIVES</b>		
F1.1.1	Explain the anatomy and physiology of endocrine system.	A
F1.1.2	Define terms associated with the endocrine system	A
F1.1.3	Describe diagnostic tests for selected endocrine system alterations and complications.	B
F1.1.4	Describe selected endocrine system alterations and complications.	B
F1.1.5	Interpret clinical manifestations to determine selected endocrine system alterations and complications.	C
F1.2.1	Describe the pharmacological agents for selected endocrine system alterations and complications.	C
F1.2.2	Describe nutritional considerations for treating selected endocrine system alterations and complications.	C
F1.2.3	Describe the nursing process for providing care for selected endocrine system alterations and complications.	C
F1.3.1	Describe the process for implementing a nursing care plan to treat selected endocrine system alterations.	c
F1.4.1	Identify expected outcomes of treatment modalities of selected endocrine system alterations and complications.	C
F1.4.2	Use critical thinking to prioritize management of care.	D
<b>CLINICAL/LAB SKILLS</b>		
<ul style="list-style-type: none"> <li>• Use of relevant technology for client care and documentation</li> <li>• Endocrine assessment</li> <li>• Insulin administration</li> <li>• Hypoglycemia management (glucagon)</li> <li>• Blood and urine glucose monitoring</li> <li>• Sliding scale</li> <li>• Client teaching for self-care, nutrition, and monitoring</li> <li>• Interpreting diagnostic data</li> </ul>		

### **MODULE F OUTLINE**

- Terminology and A& P review
- Diagnostic tests
- Diabetes
  - Types
  - Acute and chronic complications
  - Management
    - Blood and urine glucose monitoring
    - Insulin and insulin pumps
    - Oral hypoglycemic agents
    - Diet and exercise
    - Emergency management
    - Self-care and monitoring
- Nursing process
- Pharmacological agents
- Nutritional considerations

<b>MODULE G – GASTROINTESTINAL SYSTEM ALTERATIONS</b>		
<b>PROFESSIONAL COMPETENCIES</b>	<b>PERFORMANCE OBJECTIVES</b>	<b>KSA Indicators</b>
G1.0 Care for clients with selected gastrointestinal system alterations.	G1.1 Assess a client to determine selected gastrointestinal system alterations.	2c
	G1.2 Develop a nursing care plan to treat selected gastrointestinal system alterations.	2c
	G1.3 Implement a nursing care plan to treat selected gastrointestinal system alterations.	2c
	G1.4 Evaluate the effectiveness of interventions to treat selected gastrointestinal system alterations.	2c
	G1.5 Manage gastric decompression.	2c
	G1.6 Reinsert a selected gastrostomy tube.	2c
<b>LEARNING OBJECTIVES</b>		
G1.1.1	Explain the anatomy and physiology of gastrointestinal system.	A
G1.1.2	Define terms associated with the gastrointestinal system	A
G1.1.3	Describe diagnostic tests for selected gastrointestinal system alterations and complications.	B
G1.1.4	Describe selected gastrointestinal system alterations and complications.	B
G1.1.5	Interpret clinical manifestations to determine selected gastrointestinal system alterations and complications.	C
G1.2.1	Describe the pharmacological agents for selected gastrointestinal system alterations and complications.	C
G1.2.2	Describe nutritional considerations for treating selected gastrointestinal system alterations and complications.	C
G1.2.3	Describe the nursing process for providing care for selected gastrointestinal system alterations, complications, and surgical procedures.	C
G1.3.1	Describe the process for implementing a nursing care plan to treat selected gastrointestinal system alterations.	c
G1.4.1	Identify expected outcomes of treatment modalities of selected gastrointestinal system alterations and complications.	C
G1.4.2	Use critical thinking to prioritize management of care.	D
G1.5.1	Explain the process of managing gastric decompression.	c
G1.6.1	Describe the process of reinserting a selected gastrostomy tube.	c
<b>CLINICAL/LAB SKILLS</b>		
<ul style="list-style-type: none"> <li>• Use of relevant technology for client care and documentation</li> <li>• Gastrointestinal assessment</li> <li>• Reinserting a gastrostomy tube</li> <li>• Managing gastric decompression</li> <li>• Interpreting diagnostic data</li> </ul>		

**MODULE G OUTLINE**

- Terminology and A& P review
- Diagnostic tests
- Upper GI
  - Infectious/inflammatory
    - Stomatitis
    - Ulcers
    - Gastritis
    - Gastroesophageal Reflux Disease (GERD)
  - Hiatal hernias
  - Oral cancer
  - E Coli, Salmonella, Clostridium
- Nasogastric intubation
- Gastrostomy tube reinsertion and management
- Surgical procedures
  - Gastrectomy
    - Gastric decompression
  - Gastric by-pass surgery
  - Fractured mandible
- Nursing process
- Pharmacological agents
- Nutritional considerations



**MODULE H – MUSCULOSKELETAL SYSTEM ALTERATIONS**

<b>PROFESSIONAL COMPETENCIES</b>	<b>PERFORMANCE OBJECTIVES</b>	<b>KSA Indicators</b>
H1.0 Care for clients with musculoskeletal system trauma and alterations.	Given clinical situations: H1.1 Assess a client to determine musculoskeletal system trauma and alterations.	2b
	H1.2 Develop a nursing care plan to treat musculoskeletal system trauma and alterations.	2b
	H1.3 Implement a nursing care plan to treat musculoskeletal system trauma and alterations.	2b
	H1.4 Evaluate the effectiveness of interventions to treat musculoskeletal system trauma and alterations.	2b
<b>LEARNING OBJECTIVES</b>		
H1.1.1	Explain the anatomy and physiology of musculoskeletal system.	A
H1.1.2	Define terms associated with the musculoskeletal system	A
H1.1.3	Describe diagnostic tests for musculoskeletal system trauma and alterations.	B B
H1.1.4	Describe selected musculoskeletal system trauma and alterations.	C
H1.1.5	Interpret clinical manifestations to determine musculoskeletal system trauma and alterations.	
H1.2.1	Describe the pharmacological agents for musculoskeletal system trauma and alterations.	C
H1.2.2	Describe nutritional considerations for treating musculoskeletal system trauma and alterations.	C
H1.2.3	Describe the nursing process for providing care for musculoskeletal system alterations, complications, and surgical procedures.	C
H1.3.1	Describe the process for implementing a nursing care plan to treat musculoskeletal system trauma and alterations.	c
H1.3.2	Explain the nursing process for assisting clients with cast care and complications.	C
H1.3.3	Identify techniques for various crutch-walking methods.	b
H1.3.4	Identify techniques for various traction methods.	b
H1.4.1	Identify expected outcomes of treatment modalities of musculoskeletal system trauma and alterations.	C
H1.4.2	Describe techniques for management of chronic pain.	C
H1.4.3	Use critical thinking to prioritize management of care.	D

**CLINICAL/LAB SKILLS**

- Use of relevant technology for client care and documentation
- Interpreting diagnostic data
- Musculoskeletal assessment
- Crutch walking
- Traction management
- Cast care
- Chronic pain management
- Drain management
- Autologous transfusion management
- Continuous Passive Motion Machine (CPM)

**MODULE H OUTLINE**

- Terminology and A& P review
- Diagnostic tests
- Musculo-skeletal traumas
  - Sprains
  - Fractures
    - Cast care and complications
    - Traction
  - Dislocations
  - Amputations
  - Crutches and other devices
- Inflammatory alterations
  - Rheumatoid arthritis
  - Osteomyelitis
- Degenerative alterations
  - Osteoporosis
  - Osteoarthritis
- Gout
- Lyme disease
- Osteomyelitis disease
- Surgical procedures
  - Knee and hip
  - Carpal tunnel
  - Spinal fusion
  - Laminectomy
  - Disc repair
- Nursing process
- Pharmacological agents
- Nutritional considerations
- Chronic pain management

### Learning Objectives Table of specifications

The table below identifies the percentage of cognitive objectives for each module.

**Instructors should develop sufficient numbers of test items at the appropriate level of evaluation.**

	Facts/ Nomenclature A/a	Principles/ Procedures B/b	Analysis/ Operating Principles C/c	Evaluation/ Complete Theory D/d
Module A	21%	50%	-	29%
Module B	8%	17%	63%	12%
Module C	11%	11%	67%	11%
Module D	15%	31%	46%	8%
Module E	18%	18%	55%	9%
Module F	18%	18%	55%	9%
Module G	15%	15%	62%	8%
Module H	13%	27%	53%	7%

Knowledge, Skills, and Attitudes (KSA) Indicators			
	Value	Key Word(s)	Definition
Performance Ability	4	Highly Proficient	Performs competency quickly and accurately. Instructs others how to do the competency.
	3	Proficient	Performs all parts of the competency. Needs only a spot check of completed work.
	2	Partially Proficient	Performs most parts of the competency. Needs help only on hardest parts.
	1	Limited Proficiency	Performs simple parts of the competency. Needs to be told or shown how to do most of the competency.
Knowledge of Skills	d	Complete Theory	Predicts, isolates, and resolves problems about the competency.
	c	Operating Principles	Identifies why and when the competency must be done and why each step is needed.
	b	Procedures	Determines step-by-step procedures for doing the competency.
	a	Nomenclature	Names parts, tools, and simple facts about the competency.
Knowledge	D	Evaluation	Evaluates conditions and makes proper decisions about the subject.
	C	Analysis	Analyzes facts and principles and draws conclusions about the subject.
	B	Principles	Identifies relationship of basic facts and states general principles about the subject.
	A	Facts	Identifies basic facts and terms about the subject.
Affective	*5	Characterization by Value	Acting consistently with the new value
	*4	Organization	Integrating a new value into one's general set of values, giving it some ranking among one's general priorities
	*3	Valuing	Showing some definite involvement or commitment
	*2	Responding	Showing some new behaviors as a result of experience
	*1	Receiving	Being aware of or attending to something in the environment
<p><b>Alpha Scale Values</b> - Any item with an upper case letter (A, B, C, D) by itself is taught as general information on a topic. This information may be related to the competency or encompass multiple competencies. Examples might include mathematical computations or knowledge of principles such as Ohm's Law.</p> <p>A lower case letter indicates a level of "Knowledge of Skills." Individuals are taught information pertaining to performing a competency. These may be indicated alone or in conjunction with a numerical scale value. A lower case letter by itself indicates the individual is not required to perform the task-just know about the task. (Example: Can state or explain procedures for doing a task).</p> <p><b>Numerical Scale Values</b> - The numbers reflect the levels the individual will be able to perform a competency. Number values are always accompanied by lower case letters (i.e. 1a, 2b, 3c...etc.) in order to specify the level of knowledge of skills associated with the competency.</p> <p>Example: An individual with a competency with a scale indicator of 3b has received training of knowledge of skills whereby he or she can determine the correct procedures and perform with limited supervision; only requiring evaluation of the finished product or procedure.</p> <p>Asterisk items indicate desired affective domain levels and are used to indicate the desired level for a given competency. They may be used independently or with other indicators (i.e. 1a-*1, 2c-*3). If used with another indicator, separate with a hyphen.</p> <p><b>NOTE:</b> Codes indicate terminal values.</p>			