This document contains an introduction to the Ohio Integrated Technical and Academic Competency (ITAC) and Specialization ITAC; an overview of the field of practical nursing; a list acknowledging professionals who helped develop the competency list; and the comprehensive list of the professional or occupational competencies deemed essential for graduates to be able to perform proficiently when they graduate from an Ohio specialization workforce development program for practical nursing. The introduction explains the following: (1) critical academic, employability, and information technology skills have been integrated throughout the list to support the technical skills; (2) the competency profile can be used as the basis for curriculum development in Ohio's secondary, adult, and postsecondary programs; and (3) the specialization competency profile is organized so that it can be clustered or grouped in a modular approach. The overview of the occupation describes general duties, some specific tasks, employment opportunities, length of program, type of program (classroom instruction and/or work experience), and types of certificates and/or degrees. The competencies are grouped under broader skills that are, in turn, categorized under these 20 major topics: practical nursing orientation; professional practices; workplace safety; infection control and risk management; medical terminology; first aid and medical emergencies; vital signs; nutrition; basic pharmacology; nursing process; nursing communication skills; nursing clinical procedures; anatomy, physiology, and pathology; health law and ethics; psychology of stress; psychology of human relations; professionalism; teamwork in the health care setting; daily work functions; and basic computer applications. (YLB)
## Practical Nursing

### Acknowledgements

### Overview

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>54.01.00.0</td>
<td>Practical Nurse Orientation</td>
</tr>
<tr>
<td>54.02.00.0</td>
<td>Professional Practices</td>
</tr>
<tr>
<td>54.03.00.0</td>
<td>Workplace Safety</td>
</tr>
<tr>
<td>54.04.00.0</td>
<td>Infection Control and Risk Management</td>
</tr>
<tr>
<td>54.05.00.0</td>
<td>Medical Terminology</td>
</tr>
<tr>
<td>54.06.00.0</td>
<td>First Aid and Medical Emergencies</td>
</tr>
<tr>
<td>54.07.00.0</td>
<td>Vital Signs</td>
</tr>
<tr>
<td>54.08.00.0</td>
<td>Nutrition</td>
</tr>
<tr>
<td>54.09.00.0</td>
<td>Basic Pharmacology</td>
</tr>
<tr>
<td>54.10.00.0</td>
<td>The Nursing Process</td>
</tr>
<tr>
<td>54.11.00.0</td>
<td>Nursing Communication Skills</td>
</tr>
<tr>
<td>54.12.00.0</td>
<td>Nursing Clinical Procedures</td>
</tr>
<tr>
<td>54.13.00.0</td>
<td>Anatomy, Physiology, and Pathology</td>
</tr>
<tr>
<td>54.14.00.0</td>
<td>Health Law and Ethics</td>
</tr>
<tr>
<td>54.15.00.0</td>
<td>Psychology of Stress</td>
</tr>
<tr>
<td>54.16.00.0</td>
<td>Psychology of Human Relations</td>
</tr>
<tr>
<td>54.17.00.0</td>
<td>Professionalism</td>
</tr>
<tr>
<td>54.18.00.0</td>
<td>Teamwork in the health care setting</td>
</tr>
<tr>
<td>54.19.00.0</td>
<td>Daily Work Functions</td>
</tr>
<tr>
<td>54.20.00.0</td>
<td>Basic Computer Applications</td>
</tr>
</tbody>
</table>
Introduction to the Specialization ITAC

Revised 2001

The Ohio Integrated Technical and Academic Competency (ITAC) profiles are developed under the auspices of the Ohio Department of Education and the Ohio State Board of Education. They provide a broad-based educational response to Ohio's need for a skilled workforce. Each Specialization ITAC represents a profile of the professional or occupational competencies deemed essential for a graduate to perform proficiently when he or she graduates from the specialization workforce development programs in Business and Marketing, Industrial and Engineering Systems, Health Occupations, or Family and Consumer Sciences. The Specialization ITAC profile, in conjunction with the competencies identified in the Foundation and Clusters ITACs, provide a career pathway that can lead to employment or further education.

Process and Intent

The integrated competency lists are the result of all encompassing research and review of existing competency profile lists and includes input from industry, labor, professional organizations, professional and industrial representation, and national standards for a specific industry/profession. Representatives from a broad cross-section of Ohio professional organizations, businesses/professions, industry, and labor played a critical role in identifying current and future knowledge and skills for the industry, and defining the vision and scope of the profession/industry. The instructional methods and teaching strategies are the responsibility of the local school system and/or instructor.

Curriculum Applications Using the ITAC Competency Profiles

Each profile includes a comprehensive listing of occupational skill competencies that reflect the job opportunities and skills that are required to work in a specific profession/career pathway. Critical academic, employability and information technology skills have been integrated throughout the list to support the technical skills. These competency profiles will be used as the basis for curriculum development in Ohio's secondary, adult, and post-secondary programs. The specialization competency profiles are organized so that they can be clustered or grouped in a modular approach. Individual curriculum specialists can use the competencies profiles to develop instructional programs based on local needs as determined in conjunction with their local advisory committees. i.e., the specialization cluster academy approach. Final assessments will be designed to accompany each profile list and to accommodate student evaluation by modules.
Acknowledgements
Ohio Department of Education
Office of Career-Technical and Adult Education
2001 Revision

Practical Nursing

Vicki Melvin, Interim Director

Industrial and Engineering Systems, and Health Careers

Robert Bowermeister, Assistant Director
Joyce R. Boudreau, Consultant
Michael Cowles, Consultant
Gayle Parlin, Consultant
Richard Wancho, Consultant

Curriculum Consultants

Dee Allenspach
Joyce Leimbach

Professional Panel

Charlet Grooms, RN, MSN, Nursing Education Consultant, Ohio Board of Nursing, Columbus
Theda [Jody] Hostetler, RN. BSN, Castle Nursing Home, Millersburg
Lynne E. Lawson, RN, St. Rita's Medical Center, Lima
Cindy Owings, RN, Heartland Of Chillicothe, Chillicothe
Mary Jo Smallman, RN, Fulton Manor, Wauseon
Judy Stauder, RN, BSN, OOPNE Rep., Canton City Schools, Canton
Sister Joyce Soukup, NHA, MS, Franciscan Communities of Mt. Alverna, Parma

Educational Review Panel

Janet Boeckmann, RN, North Central State College, Mansfield
Dianne Mawhirter, RN, BSN, EHOVE Career Center, Milan
Janice Melnick, RN, Cuyahoga Community College, Highland Hills
Frances Shul, RN, Miami Valley CTC, Clayton
Kathy Sommers, RN, Wayne Cty School of PN, Smithville
Cathy Learn, RN, Mid East Ohio CC, Zanesville
Overview

Practical Nursing

A career in practical nursing is both rewarding and challenging. Working as a practical nurse is for the person who enjoys working with and helping people. Successful students will have a good aptitude for both science and mathematics. The practical nurse must be able to work in a multi-task environment and enjoy interacting with patients as well as registered nurses, family, and physicians. Licensed practical nurses (LPNs), care for the sick, injured, convalescent, or disabled under the direction of physicians and registered nurses.

Most practical nurses provide basic bedside care. They take vital signs such as temperature, blood pressure, pulse, and respiration. The curriculum for the Practical Nurse program includes: classroom instruction via lectures, demonstrations, and discussions. Hospitals, medical centers, nursing home or care centers, or medical-surgical clinics often work cooperatively with schools to provide students with clinical practice and experience.

The LPN is responsible for accurate documentation of patient care. Practical nurses observe patients and report their progress and/or reactions to medications or treatments. They collect samples from patients for testing, assist with routine laboratory tests, feed patients, and record food and liquid intake and output. They help patients with bathing, dressing, providing personal hygiene care, keeping them comfortable, while being sensitive to their emotional well-being. In some health care settings, they may administer medications or assist with intravenous fluids.

In addition to providing routine bedside care, they may also help evaluate residents’ needs, develop care plans, and supervise the care provided by others. In doctors’ offices and clinics, they may also make appointments, keep records, or perform other office duties. LPNs who work in private homes may be asked to prepare meals and teach family members simple nursing tasks.

Some experienced LPNs will be assigned advanced level positions where they will be responsible for supervising nursing assistants and aides in a health care setting. Like other health-related positions, the LPN often advances to a higher career level with additional education.
54.00.00.0 Practical Nursing

54.01.00.0 Practical Nurse Orientation

54.01.00.0 Define role of the practical nurse
54.01.01.0 Survey history of the practical nurse
54.01.02.0 Identify scope of practical nurse responsibilities
54.01.03.0 Explore career opportunities for practical nurse

54.01.02.0 Project professional image
54.01.02.01.0 Define professionalism for practical nurse
54.01.02.02.0 Exhibit professional appearance
54.01.02.03.0 Exhibit professional manners
54.01.02.04.0 Project professional attitude
54.01.02.05.0 Identify individual's vital role in organization
54.01.02.06.0 Exhibit proper etiquette in professionally related situations

54.02.00.0 Professional Practices

54.02.01.0 Demonstrate professional responsibility and accountability in accordance with appropriate professional organizations
54.02.01.01.0 Describe professional standards
54.02.01.02.0 Explain responsibility for accountability to professional standards
54.02.01.03.0 Identify responsibility to client(s) and employer(s)
54.02.01.04.0 Explain consequences of unprofessional behavior

54.02.02.0 Practice legal and ethical behavior
54.02.02.01.0 Differentiate between legal and ethical behavior
54.02.02.02.0 Explain terms, principles, and characteristics of legal and ethical behavior (e.g., loyalty, discretion, solicitation, competitor, supplier)
54.02.02.03.0 Explain state and federal rules and regulations governing the practice of the profession
54.02.02.04.0 Explain effects of unethical behavior of health care professionals
54.02.02.05.0 Explain ethical dilemmas in health care (e.g., death and dying, medical ethics committees)
54.02.02.06.0 Explain health care professional's responsibility in situations of patient abuse and neglect
54.02.02.07.0 Explain health care professional's responsibility in situations of coworker chemical addiction
54.02.02.08.0 Identify personal, societal, and global implications of substance use and abuse
54.02.02.09.0 Practice within the role and scope of the profession as defined by law, job description, and facility/arena of practice
54.02.02.10.0 Comply with standards of safe nursing practices as defined in Chapter 4723-4, Ohio Administrative Code, Standards of Safe Nursing Practice for RNs and LPNs
54.02.02.11.0 Explain process of certification/licensure of health professionals including responsibility to maintain current license

54.02.03.0 Demonstrate delegation by LPN in accordance with Chapter 4723-13, Delegation Licensed Nurses, Ohio Administrative Code
54.02.03.01.0 Identify delegation rules
54.02.03.02.0 Implement delegation rules

54.03.00.0 Workplace Safety

54.03.01.0 Maintain safe working environment
54.03.01.01.0 Comply with Hazardous Materials Information Sheet (HMIS), Materials Safety Data Sheets (MSDS) and Occupational Safety and Health Administration (OSHA) regulations
54.03.01.02.0 Comply with all MSDS regulations regarding hazardous materials
54.03.01.03.0 Maintain clean work area
54.03.01.04.0 Comply with regulatory guidelines in handling, labeling, and disposal of solutions
54.03.01.05.0 Comply with workplace and personal safety rules and procedures
54.03.01.06.0 Comply with applicable electrical, mechanical, hydraulic, and pneumatic safety rules and procedures
54.03.01.07.0 Identify location of control panels, shut off valves, and fire extinguishers

54.03.02.0 Demonstrate knowledge of ergonomics
54.03.02.01.0 Define ergonomics
54.03.02.02.0 Define maximum permissible limit (MPL) and action limit (AL) for lifting
54.03.02.03.0 Define cumulative trauma disorder (CTD)
54.03.02.04.0 Minimize use of excessive muscle/physical force
54.03.02.05.0 Minimize repetitive tasks
54.03.02.06.0 Explain need for appropriate working heights of chairs, stools, footrests, workbenches, and equipment
54.03.02.07.0 Explain need for adequate lighting
Infection Control and Risk Management

Comply with local, state, and federal regulations
- Explain universal/standard precautions to transmission of infectious diseases (e.g., HIV/AIDS, hepatitis, STDs)
- Explain state and federal governmental roles in universal/standard precautions as outlined by the Center for Disease Control (CDC)
- Comply with Environmental Protection Agency (EPA) regulations
- Identify types of diseases that need to be reported
- Use precautions to prevent contamination

Comply with environmental safety standards, accident prevention methods, and disaster plans
- Observe environmental safety rules of facility
- Identify fire prevention methods, fire control, fire alarm systems, and fire reporting procedures
- Demonstrate use of fire and safety equipment
- Demonstrate safety precautions for using equipment
- Demonstrate safety precautions for using liquids and poisonous substances
- Conduct safety inspection of client area
- Correct/monitor safety hazards (e.g., spills, electrical)
- Complete incident reports for accidents or safety infractions
- Identify legal implications of accidents in health care facility
- Explain potential sources of hazards (e.g., fire, electrical, chemical, biological, radioactive)
- Follow procedures for dealing with exposure to hazardous situations (e.g., eye and face wash, shower, fire extinguishers)
- Label/store materials in accordance with employer's policies and/or manufacturer's guidelines
- Follow manufacturer's instructions for safe operation of all equipment and instruments

Maintain personal safety and hygiene
- Use universal/standard precautions (i.e., personal protective equipment)
- Demonstrate isolation techniques
- Practice proper hygiene
- Obtain immunization against communicable diseases
- Identify at-risk behaviors that promote the spread of communicable diseases
- Differentiate fact from fallacy regarding the transmission of communicable diseases
- Identify common causes of back injuries
- Demonstrate proper body mechanics involved in lifting, moving, transferring, ambulating, and positioning patient

Maintain infection control of work area
- Identify modes of transmission of infection
- Identify methods for preventing infection transmission
- Differentiate between bacteriostatic and bacteriocidal
- Define "nosocomial infection"
- Implement isolation procedures

Apply aseptic and sterilizing principles
- Follow manufacturer's instructions for safe operation of all equipment and instruments
- Differentiate between medical and surgical aseptic techniques
- Verify that date is current on sterilized equipment

Maintain patient safety
- Verify patient identity
- Introduce self/title to patient
- Redirect patient to safe activities (e.g., touch, diversion of attention, music)
- Utilize gait belt
- Assist patient to walk with assistive ambulation devices
- Demonstrate safe usage of patient transport equipment
- Demonstrate safe handling of medical equipment (e.g., IVs, catheters, oxygen tubing)
- Identify proper bed height
- Position patient maintaining proper body alignment, supporting body parts
- Demonstrate patient transfer techniques
- Identify safety needs of medicated patient
- Demonstrate usage of side rails
- Identify placement of patient call device
- Orient patient to surroundings
- Identify behaviors that may escalate to violence
- Identify steps in managing at-risk patient
54.05.00.0 Medical Terminology
54.05.01.0 Use common medical symbols, abbreviations, and acronyms
  54.05.01.01 Identify commonly used symbols (e.g., O2, H2O)
  54.05.01.02 Write out full wording for commonly used symbols
  54.05.01.03 Write out full wording for commonly used acronyms (e.g., bx = biopsy)
  54.05.01.04 Spell medical terms correctly
54.05.02.0 Demonstrate knowledge of medical terminology
  54.05.02.01 Define basic prefixes and suffixes
  54.05.02.02 Spell basic prefixes and suffixes
  54.05.02.03 Pronounce basic prefixes and suffixes
  54.05.02.04 Identify principal terms relating to the body as a whole
  54.05.02.05 Define terminology of human physiology and anatomy

54.06.00.0 First Aid and Medical Emergencies
54.06.01.0 Maintain/administer first aid and cardiopulmonary resuscitation
  (CPR) certification according to standards
  54.06.01.01 Acquire/maintain first aid certification
  54.06.01.02 Acquire/maintain CPR certification
  54.06.01.03 Update CPR certification
  54.06.01.04 Administer CPR to infants and children
  54.06.01.05 Administer CPR to adults
  54.06.01.06 Administer care for obstructed airways for infants, children, and adults
54.06.02.0 Respond to medical emergencies
  54.06.02.01 Identify emergency situation
  54.06.02.02 React to emergency per protocol
  54.06.02.03 Identify patient
  54.06.02.04 Perform head-to-toe patient assessment
  54.06.02.05 Describe patient needs
  54.06.02.06 Describe signs and symptoms of emergency situations
  54.06.02.07 Identify basic emergency equipment
54.06.03.0 Perform first aid
  54.06.03.01 Assist with first aid for wounds or fractures
  54.06.03.02 Administer first aid to control bleeding
  54.06.03.03 Administer first aid for shock
  54.06.03.04 Administer first aid for burn patient
  54.06.03.05 Assist with first aid for poisoned patient
  54.06.03.06 Assist with choking patient
  54.06.03.07 Assist with patient having seizure
  54.06.03.08 Assist with fainting patient

54.07.00.0 Vital Signs
54.07.01.0 Measure Temperature
  54.07.01.01 Follow safety and aseptic techniques to measure temperature
  54.07.01.02 Identify normal range and average temperature for oral, axillary, tympanic, and rectal temperatures
  54.07.01.03 Identify factors that may affect temperature
  54.07.01.04 Select route to measure temperature
  54.07.01.05 Demonstrate use of different types of thermometers
  54.07.01.06 Record temperature measurements
  54.07.01.07 Report abnormal temperature measurements
  54.07.01.08 Maintain thermometer(s)
54.07.02.0 Measure pulse
  54.07.02.01 Identify criteria for selecting pulse site (e.g., femoral, apical, radial)
  54.07.02.02 Identify normal pulse range for different age groups
  54.07.02.03 Identify factors that may affect pulse
  54.07.02.04 Identify variations from normal pulse rate that should be reported
  54.07.02.05 Record pulse
54.07.03.0 Measure ventilation
  54.07.03.01 Measure rate, depth, and rhythm of respiration
  54.07.03.02 Identify normal respiratory rate for different age groups
  54.07.03.03 Report signs of compromised respiration
  54.07.03.04 Identify factors that may affect respiration
  54.07.03.05 Record respiration
54.07.04.0 Measure blood pressure
54.07.04.01 Identify etiology of hypertension
54.07.04.02 Identify normal range of blood pressure for different age groups
54.07.04.03 Identify factors that affect blood pressure
54.07.04.04 Demonstrate use of sphygmomanometer (i.e., aneroid, mercurial, electronic)
54.07.04.05 Demonstrate procedure to measure blood pressure
54.07.04.06 Demonstrate location of stethoscope for proper blood pressure reading
54.07.04.07 Record blood pressure

54.07.05.0 Obtain physical measurements
54.07.05.01 Measure adult or child height and weight
54.07.05.02 Measure adult or child chest and waist expansion
54.07.05.03 Measure infant head and chest circumference
54.07.05.04 Measure auditory status
54.07.05.05 Measure visual status (e.g., eye chart)
54.07.05.06 Measure infant height and weight
54.07.05.07 Identify color blindness
54.07.05.08 Record all results

54.08.00.0 Nutrition
54.08.01.0 Identify fundamentals of nutrition
54.08.01.01 Identify food nutrients
54.08.01.02 Explain role of nutrients to body functions
54.08.01.03 Develop a balanced diet using the food pyramid
54.08.01.04 Explain regional, cultural, and ethnic food patterns
54.08.01.05 List factors to consider when purchasing food
54.08.01.06 Identify component of a balanced diet across the lifespan (e.g., United State Department of Agriculture (USDA) food pyramid)
54.08.01.07 List factors to consider when storing food
54.08.01.08 Identify methods of food preparation
54.08.01.09 Instruct patient in nutrition principles

54.08.02.0 Identify nutritional needs related to special conditions and/or
54.08.02.01 Describe common diets related to dietary alternatives (e.g., pureed, mechanical-soft)
54.08.02.02 Describe special diets (e.g., exchange diet)
54.08.02.03 Identify risks of non-compliance with dietary restrictions
54.08.02.04 Educate patient regarding dietary hazards (e.g., caffeine, fats)

54.08.03.0 Draw correlation between diet and exercise
54.08.03.01 Identify methods of exercise
54.08.03.02 Explain effect of exercise and nutrition on energy level
54.08.03.03 Identify weight-related issues

54.08.04.0 Identify advantages and disadvantages of alternative methods of
54.08.04.01 Identify effects of tube feedings
54.08.04.02 Identify effects of intravenous, hyperalimentation, and lipids

54.09.00.0 Basic Pharmacology
54.09.01.0 Maintain supply of medications, as applicable to the profession
54.09.01.01 Maintain accurate narcotic count
54.09.01.02 Store medications properly
54.09.01.03 Dispose of medications in accordance with employer's policies and government regulations

54.09.02.0 Calculate dosage according to authorized health care
54.09.02.01 Verify accuracy of medical orders
54.09.02.02 Use approved drug reference resource (e.g., Physician's Desk Reference [PDR])
54.09.02.03 Transcribe medication order
54.09.02.04 Calculate dosage accurately
54.09.02.05 Verify type of intravenous solution
54.09.02.06 Monitor Intravenous rate of flow

54.09.03.0 Instruct patients on use of medications
54.09.03.01 Provide verbal and/or written information regarding medication
54.09.03.02 Explain use of medications (e.g., identify side effects, adverse effects, interactions)
54.09.04.0 Administer medications according to authorized health care provider orders as applicable to the profession
54.09.04.01 Follow the six rights of medication administration (i.e., right patient, medication, time, route, dosage, and documentation)
54.09.04.02 Verify patient allergies
54.09.04.03 Use reference materials
54.09.04.04 Prepare medications accurately
54.09.04.05 Document medication administration
54.09.04.06 Document patient response to medications

54.10.00.0 The Nursing Process
54.10.01.0 Perform initial patient assessment
54.10.01.01 Provide privacy and patient confidentiality
54.10.01.02 Record medical/health history (e.g., allergies, current medications)
54.10.01.03 Identify bio-psycho-social condition
54.10.01.04 Validate data with patient or responsible party
54.10.01.05 Compare patient's condition to norms
54.10.01.06 Communicate abnormal findings to appropriate health care provider

54.10.02.0 Collect ongoing patient data
54.10.02.01 Observe psychological and physical behavior
54.10.02.02 Assess ability to perform activities for daily living (ADLs)
54.10.02.03 Observe interaction of patient and/or significant other/responsible party
54.10.02.04 Observe patient response to care
54.10.02.05 Document additional assessment findings

54.10.03.0 Formulate patient plan of care
54.10.03.01 Participate in the development of a plan of care
54.10.03.02 Assist in developing a teaching plan and discharge plan

54.10.04.0 Implement safe, effective, comforting patient centered nursing care across the life span
54.10.04.01 Implement plan of care as developed
54.10.04.02 Describe nursing interventions and outcomes

54.10.05.0 Evaluate outcomes of nursing care
54.10.05.01 Describe/document effect of nursing intervention(s)
54.10.05.02 Verify patient and/or significant other compliance with planned care
54.10.05.03 Identify outcomes met
54.10.05.04 Report findings to appropriate health care provider

54.11.00.0 Nursing Communication Skills
54.11.01.0 Demonstrate effective communications/interactions skills
54.11.01.01 Identify methods to obtain information through communications
54.11.01.02 Describe factors that facilitate or hinder communications
54.11.01.03 Apply principles of therapeutic communication
54.11.01.04 Practice confidentiality

54.11.02.0 Develop teaching plan for patient/significant other/responsible
54.11.02.01 Identify teaching needs of patient/significant other/responsible party
54.11.02.02 Develop the teaching plan based on need
54.11.02.03 Implement teaching plan

54.11.03.0 Evaluate effectiveness of education plan
54.11.03.01 Identify change in patient behavior
54.11.03.02 Reinforce education if needed

54.12.00.0 Nursing Clinical Procedures
54.12.01.0 Perform nursing procedures following legal guidelines
54.12.01.01 Verify order, as appropriate
54.12.01.02 Read procedure manual

54.12.02.0 Perform nursing skills
54.12.02.01 Perform or delegate skills
54.12.02.02 Evaluate basic care skills provided
54.12.02.03 Demonstrate safe, effective equipment operation in health care settings
54.13.00.0 Anatomy, Physiology, and Pathology

54.13.01.0 Demonstrate general knowledge of basic chemistry
- Identify elements on periodic table
- Identify simple chemical formulas
- Explain the structure of atoms and molecules
- Define synthesis, decomposition, and exchange reactions
- Define diffusion, filtration, and osmosis
- Differentiate between acids and bases

54.13.02.0 Demonstrate general knowledge of the human body
- Explain the relationship between human anatomy and physiology
- Describe the anatomical position
- Identify body directions, planes, and cavities
- Name major systems, their functions, and components
- Define cell composition, shape and size
- Identify basic life processes of cell division and transportation
- Identify four major tissue types, their function and subtypes
- Differentiate between benign and malignant
- Describe effect of aging across the lifespan

54.13.03.0 Demonstrate knowledge of integumentary system
- Identify functions of the integumentary system
- Describe skin receptor responses (e.g., to touch/pressure, temperature, and pain)
- Name layers of the skin
- Identify structures associated with skin, hair, hair follicle, sebaceous glands, and sudoriferous glands
- Identify different types of body membranes
- Identify common skin disorders

54.13.04.0 Demonstrate knowledge of skeletal system
- Identify functions of skeletal system
- List the classifications of bone types
- Describe composition of bone
- Define function of bone marrow
- Explain process of bone formation and growth
- Identify major bones of the human skeleton
- Name types of bone markings and their associated terms
- Describe structure of various joints
- Name categories of joints
- Define type/range of motion for different joints
- Identify types of fractures
- Identify methods of correction for fractures
- Identify various disorders and injuries of bones and joints

54.13.05.0 Demonstrate knowledge of muscular system
- Identify major muscles of the human body
- Identify origin, insertion, and function of muscles
- Identify types of muscle tissue
- Describe muscle contraction
- Define parts of a muscle and muscle types
- Define muscle tone, isotonic, and isometric contractions
- Describe the anatomy and physiology of pain
- Describe diseases, disorders, abnormal conditions, and injuries of the muscles

54.13.06.0 Demonstrate knowledge of nervous system
- Identify main parts of the nervous system
- Describe general functions of the nervous system
- Name principal cell types that compose the nervous system
- Describe neuralgia, including function and various types
- Define ganglia, nuclei, tracts, and nerves, noting differences
- Describe transmission of a nerve impulse
- Describe the anatomy and physiology of pain
- Describe structures and functions of various parts of the brain and spinal cord
- Explain functions/divisions of autonomic nervous system
- Describe diseases, disorders, and injuries of the nervous system

54.13.07.0 Demonstrate knowledge of circulatory/cardiocirculatory system
- Identify structures and function of the heart
- Trace pathway of blood through the heart
- Describe route of blood circulation throughout the body
- Define blood pressure, pulse, systole, diastole, and cardiac cycle
- Describe pathway of impulses through the heart's conduction system
- List factors that influence heart rate
- Identify structure and function of blood vessels (i.e., arteries, veins, and capillaries)
54.13.07.08 Identify major blood vessels
54.13.07.09 Identify structures involved in fetal circulation
54.13.07.10 Identify pulse points
54.13.07.11 Identify major blood components
54.13.07.12 Identify blood types
54.13.07.13 Describe blood-clotting process
54.13.07.14 Describe diseases and disorders of the circulatory/cardiovascular system

54.13.08.0 Demonstrate knowledge of lymphatic system
54.13.08.01 Name structures of the lymphatic system
54.13.08.02 Identify functions of the lymphatic system
54.13.08.03 Explain relationship between the lymphatic system and the cardiovascular system
54.13.08.04 Explain body's immune responses
54.13.08.05 Define antigens and antibodies and antibody reactions
54.13.08.06 Differentiate between active and passive immunity
54.13.08.07 Explain differences among the five major classes of antibodies
54.13.08.08 Describe common immune deficiencies, allergies, and autoimmune disorders
54.13.08.09 Describe diseases and disorders of the lymphatic system

54.13.09.0 Demonstrate knowledge of respiratory system
54.13.09.01 Identify major respiratory system organs and function of each
54.13.09.02 Describe function of major respiratory system organs and structures
54.13.09.03 Define external and internal respiration, ventilation, expiration, and inspiration
54.13.09.04 Describe process of gas exchange in the lungs and the tissues
54.13.09.05 Explain role of respiratory muscles in breathing
54.13.09.06 Identify brain areas involved in the control of respiration
54.13.09.07 Explain respiratory volumes and capacities
54.13.09.08 Describe diseases and disorders and injuries of the respiratory system

54.13.10.0 Demonstrate knowledge of digestive system
54.13.10.01 Identify structures and functions of the digestive system
54.13.10.02 Describe mechanisms of mastication, swallowing, vomiting, and defecation
54.13.10.03 Define anabolism and catabolism
54.13.10.04 Define basal metabolic rate and total metabolic rate
54.13.10.05 Describe diseases and disorders of the digestive system

54.13.11.0 Demonstrate knowledge of endocrine system
54.13.11.01 Differentiate between endocrine and exocrine glands
54.13.11.02 Identify major endocrine glands and hormones produced by each
54.13.11.03 Explain response of body systems to hormones
54.13.11.04 Describe diseases and disorders of the endocrine glands

54.13.12.0 Demonstrate knowledge of urinary system
54.13.12.01 Identify structure and functions of the urinary system
54.13.12.02 Explain functioning of the urinary system
54.13.12.03 Identify nitrogenous waste found in urine
54.13.12.04 Explain how water and electrolyte balance is maintained by the body
54.13.12.05 Describe urination process
54.13.12.06 Describe diseases and disorders of the urinary system

54.13.13.0 Demonstrate knowledge of reproductive system
54.13.13.01 Identify structures and functions of the reproductive system
54.13.13.02 Identify major organs of the reproductive system
54.13.13.03 Describe phases of the menstrual cycle
54.13.13.04 Identify stages of fetal development
54.13.13.05 Explain physiology of childbirth (e.g., prenatal, labor and delivery, postpartum)
54.13.13.06 Describe diseases and disorders of the reproductive system

54.13.14.0 Demonstrate knowledge of senses
54.13.14.01 Identify major structures and functions of sight, hearing, smell, taste, and touch
54.13.14.02 Describe diseases and disorders and injuries of the senses

54.14.00.0 Health Law and Ethics
54.14.01.0 Describe legal ramifications of misconduct
54.14.01.01 Explain terms, principles, and characteristics of legal and ethical behavior
54.14.01.02 Explain legal and ethical ramifications of breaching patient confidentiality
54.14.02.0 Practice discretion regarding patient information
54.14.02.01 Identify components of Patient Bill of Rights
54.14.02.02 Communicate patient's rights and responsibilities
54.14.02.03 Identify reasons for sharing patient information and appropriate persons to whom information can be released
54.14.02.04 Maintain confidentiality
54.14.02.05 Explain Anatomical Gift Act
54.14.02.06 Explain advance directives and living will
54.14.02.07 Explain informed consent
54.14.02.08 Identify reasons for termination of patient services
54.14.02.09 Explain consequences of noncompliance with physician's recommendations
54.14.02.10 Describe importance of proper patient sample identification (e.g., sputum, urine, blood)

54.14.03.0 Practice personal professional protocol with medical community
54.14.03.01 Explain process of certification/licensure of health professionals
54.14.03.02 Maintain integrity of personal files
54.14.03.03 Explain statute of limitation for records and reports
54.14.03.04 Identify ownership of medical records
54.14.03.05 Maintain procedures for legal access to patient and/or records
54.14.03.06 Investigate professional liability coverage options

54.15.00.0 Psychology of Stress
54.15.01.0 Analyze factors that influence a patient's response to stress
54.15.01.01 Describe the physiology of stress
54.15.01.02 Differentiate between stress and stressors
54.15.01.03 Explain how an individual's perception of stress influences the response to stressors
54.15.01.04 Explain how internal and external factors influence one's response to stress
54.15.01.05 Identify coping mechanisms used to decrease stress
54.15.01.06 Identify biological adaptive responses to stress

54.15.02.0 Analyze physiological response to stress
54.15.02.01 Describe the affects of stress on the body systems
54.15.02.02 Explain how internal and external factors relate to the physiological stress response
54.15.02.03 Differentiate between immune systems response to stressors in children Vs adults
54.15.02.04 Explain how stress relates to activation of disease

54.15.03.0 Analyze psychological response to stress
54.15.03.01 Identify psychological stressors
54.15.03.02 Describe relationship between personality types and the stress response
54.15.03.03 Differentiate between cognitive and behavioral coping mechanisms
54.15.03.04 Identify a patient's ability to cope with stress based on individual and stressor characteristics
54.15.03.05 Identify types of coping strategies
54.15.03.06 Identify selected defense mechanisms
54.15.03.07 Summarize ineffective coping behaviors

54.15.04.0 Provide care for a patient with an ineffective coping response
54.15.04.01 Identify psychological responses to stress in a patient
54.15.04.02 Demonstrate sensitivity for patient's feelings when providing patient care
54.15.04.03 Implement strategies to assist in stress reduction
54.15.04.04 Evaluate selected patient interventions
54.15.04.05 Suggest alternative measures for intervention if necessary

54.16.00.0 Psychology of Human Relations
54.16.01.0 Explain human growth and development
54.16.01.01 Describe characteristics of growth and development from conception to birth
54.16.01.02 Describe characteristics of growth and development from birth through preschool
54.16.01.03 Describe characteristics of growth and development from school age through adolescence
54.16.01.04 Describe characteristics of growth and development of the adult through the life span

54.16.02.0 Demonstrate appropriate communication techniques
54.16.02.01 Identify components of nurse-patient relationship
54.16.02.02 Identify uniqueness of individual (e.g., cultural, generational, social, ethnic)
54.16.02.03 Treat patient with respect and dignity
54.16.02.04 Identify assertive, aggressive, and passive responses
54.16.02.05 Differentiate between acceptable and unacceptable touching
54.16.02.06 Identify barriers to communication
54.16.03.0 Establish rapport
54.16.03.01 Describe proper manner for greeting a patient
54.16.03.02 Adapt communication to individual's ability to understand (e.g., functioning level, emotional state, and educational level)
54.16.03.03 Respond to verbal and nonverbal communication
54.16.03.04 Serve as liaison between physician, patient, and others
54.16.03.05 Verify patient's understanding of communication
54.16.03.06 Translate medical terms into language patient can understand
54.16.03.07 Interpret patient's reaction to illness and disability
54.16.03.08 Identify individual, cultural, and socioeconomic differences
54.16.03.09 Identify methods to communicate with patients or responsible party with sensory disorders
54.16.03.10 Support patient/responsible party during the grief process
54.16.03.11 Orient patient to policies, facilities, and staff
54.16.03.12 Respond to patient/responsible party in a therapeutic manner
54.16.03.13 Treat patient with empathy and be nonjudgmental
54.16.03.14 Support patient's right to make decisions regarding care
54.16.03.15 Support patient/responsible party's verbalization of feelings

54.16.04.0 Follow established procedures for communication and
54.16.04.01 Communicate reports of patient status
54.16.04.02 Complete interdepartmental requisitions (e.g., therapies, procedures, tests)
54.16.04.03 Proofread communications
54.16.04.04 Initiate medical records according to institutional policies
54.16.04.05 Document/maintain medical records according to institutional policies
54.16.04.06 Interpret patient-related documents
54.16.04.07 Participate in team conferences
54.16.04.08 Report change in patient status
54.16.04.09 Clarify physician's orders
54.16.04.10 Identify various charting methods
54.16.04.11 Respond to request for service
54.16.04.12 Respond to request from patient's funding source
54.16.04.13 Notify patient or responsible party of changes required in treatment plan
54.16.04.14 Write instructions for use of patient equipment (e.g., orthotics, prosthesis)
54.16.04.15 Write instructions for a home therapy program
54.16.04.16 Witness a consent form

54.16.05.0 Document patient progress
54.16.05.01 Record current treatment and patient response
54.16.05.02 Use correct grammar, spelling, and approved abbreviations
54.16.05.03 Secure appropriate signatures
54.16.05.04 Write legibly

54.17.00.0 Professionalism
54.17.01.0 Formulate individual and professional goals
54.17.01.01 Set flexible, realistic, and measurable goals
54.17.01.02 Identify potential barriers to achieving goals
54.17.01.03 Identify strategies for addressing barriers to goal achievement
54.17.01.04 Identify long-term goals and short-term goals
54.17.01.05 Prioritize goals
54.17.01.06 Evaluate/adjust goals
54.17.01.07 Obtain support for goals

54.17.02.0 Support community well-being
54.17.02.01 Identify environmental, educational, and social issues
54.17.02.02 Participate in social and/or community/industry activities

54.17.03.0 Achieve organizational goals
54.17.03.01 Demonstrate knowledge of organization's mission/goals
54.17.03.02 Evaluate personal goals in relation to organizational goals
54.17.03.03 Monitor progress by evaluating feedback
54.17.03.04 List responsibilities in relation to organizational goals
54.17.03.05 Accomplish assigned tasks
54.17.03.06 Exercise responsibility in relation to organizational goals
54.17.03.07 Set appropriate personal performance standards
54.17.03.08 Communicate goals with supervisor and peers
54.17.03.09 Demonstrate knowledge of services
54.17.03.10 Promote organizational image and mission
54.17.04.0 Demonstrate positive relations in the workplace
54.17.04.01 Recognize diversity in the workplace (e.g., cultural, educational level, socio-economic differences, individual exceptionalities)
54.17.04.02 Identify personality types
54.17.04.03 Identify methods of working with various personalities
54.17.04.04 Identify various management styles
54.17.04.05 Participate in collaborative efforts directed toward meeting organizational goals
54.17.04.06 Accept constructive criticism
54.17.04.07 Give constructive feedback
54.17.04.08 Adapt to changes in workplace

54.17.05.0 Manage stressful situations
54.17.05.01 Identify personal and professional factors contributing to stress
54.17.05.02 Describe physical and emotional responses to stress
54.17.05.03 Evaluate positive and negative effects of stress
54.17.05.04 Implement strategies to manage stress
54.17.05.05 Develop/maintain support systems
54.17.05.06 Analyse effects of family on work and work on family

54.17.06.0 Apply lifelong learning skills
54.17.06.01 Define lifelong learning
54.17.06.02 Identify factors that cause need for lifelong learning
54.17.06.03 Describe importance of flexibility and adaptability
54.17.06.04 Evaluate need for continuing education/training

54.17.07.0 Manage professional development
54.17.07.01 Identify career opportunities
54.17.07.02 Participate in continuing education/training opportunities (e.g., journals, seminars/workshops, professional organizations)
54.17.07.03 Identify continuing education requirements for license renewal
54.17.07.04 Maintain personal/professional support system
54.17.07.05 Build professional network
54.17.07.06 Develop communication skills
54.17.07.07 Develop leadership and management skills
54.17.07.08 Develop critical thinking skills
54.17.07.09 Develop problem-solving skills

54.18.00.0 Teamwork in the health care setting
54.18.01.0 Demonstrate knowledge of teamwork
54.18.01.01 Define responsibility and accountability within the team
54.18.01.02 Identify appropriate situations for using teams
54.18.01.03 Define team structures (e.g., cross-functional, quality improvement, task force, quality circles)
54.18.01.04 Identify team-building concepts
54.18.01.05 Describe characteristics and dynamics of teams
54.18.01.06 Identify characteristics of effective team leaders and members
54.18.01.07 Identify scope of practice for each licensed team member

54.18.02.0 Identify conditions essential to teamwork
54.18.02.01 Explain influence of culture on teamwork
54.18.02.02 Identify responsibility of each team member
54.18.02.03 Identify methods of involving each member of a team
54.18.02.04 Explain how individuals from various backgrounds contribute to work-related situations (e.g., technical training, cultural heritage)
54.18.02.05 Explain purpose of facilitators
54.18.02.06 Identify problem-solving techniques
54.18.02.07 Define consensus, reward/recognition system, mutual respect, and equality

54.19.00.0 Daily Work Functions
54.19.01.0 Maintain work flow
54.19.01.01 Organize work
54.19.01.02 Prioritize work
54.19.01.03 Apply time-management techniques
54.19.01.04 Complete assigned tasks in a timely manner
54.19.01.05 Work cooperatively with team members

54.19.02.0 Perform telecommunications operations
54.19.02.01 Display telephone etiquette
54.19.02.02 Operate equipment (i.e., facsimile [FAX] modem, electronic mail, voice mail systems, Internet systems)
54.19.02.03 Use telephone system according to facility protocol
54.20.00.0 Basic Computer Applications

54.20.01.0 Demonstrate basic computer literacy
  54.20.01.01 Keyboard proficiently
  54.20.01.02 Manipulate files (e.g. copy, rename, delete)

54.20.02.0 Operate computer hardware
  54.20.02.01 Identify hardware and its use
  54.20.02.02 Demonstrate basic care of hardware

54.20.03.0 Utilize password security systems
  54.20.03.01 Secure data using password system
  54.20.03.02 Retrieve data
NOTICE

Reproduction Basis

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (3/2000)