

Health Assisting Careers

8331 36 weeks

Table of Contents

Acknowledgments.....	1
Course Description.....	3
Task Essentials Table.....	3
Curriculum Framework.....	6
Functioning as a Member of the Healthcare Team.....	6
Demonstrating an Understanding of Legal and Ethical Considerations of Healthcare Team Members.....	9
Communicating within the Healthcare Setting.....	13
Providing for Basic Health Needs.....	16
Incorporating Safety Procedures.....	26
Understanding Body Systems and Disorders.....	33
Assisting with Patient/Client Procedures.....	48
Meeting Nutritional Needs.....	58
Identifying First Aid Concepts.....	64
Understanding Life Span Development.....	66
Obtaining Employment.....	69
Describing the Opioid Crisis.....	71
Examining the Key Factors of Drug Addiction.....	75
Understanding Pain Management Protocols.....	78
Working with Patients and Caregivers.....	87
SOL Correlation by Task.....	88
Entrepreneurship Infusion Units.....	93
Opioid Abuse Prevention Education.....	93
Appendix: Credentials, Course Sequences, and Career Cluster Information.....	95

Acknowledgments

The components of this instructional framework were developed by the following business panel and curriculum development team members:

Sharon Adams, M.A.Ed., Care Coordinator/Trainer, Kenner Army Health Clinic, Fort Lee, Virginia
Dovie Blankenship, Teacher, Bassett High School, Henry County Schools
Toni Bowman, Teacher, Pulaski County High School, Pulaski County Public Schools
Shirley Buggs, Registered Nurse (ret.)
Cassandra Cooley-Ellis, Registered Nurse, Virginia Commonwealth University Health System
Stephanie Currin, M.Ed, Ed.S., Outreach Coordinator, Southern Virginia Higher Education Center
Karen Grove, M.Ed., Associate Professor/Program Head Healthcare Technician, Reynolds Community College
Dianne Lacy, Teacher, Christiansburg High School, Montgomery County Public Schools
Wynne Parker, Teacher, Blacksburg High School, Montgomery County Public Schools
Jeannette Pouncey, Nursing Supervisor (ret.), Southside Regional Medical Center
John SanGiovanni, M.Ed., Health Sciences Instructor/Nurse Aid Instructor, Smithfield High School, Isle of Wight County Schools
D. Marie Stone, Teacher, Martinsville High School, Martinsville City Public Schools

Tasks/competencies related to opioids were developed by:

David E. Brown, DC, Director, Virginia Department of Health Professions, Henrico
Linda S. Mintle, PhD, Chair, Division of Behavioral Health, College of Osteopathic Medicine, Liberty University, Lynchburg
A. Omar Abubaker, DMD, PhD, Professor and Chair, Department of Oral and Maxillofacial Surgery, Virginia Commonwealth University, Richmond

Correlations to the Virginia Standards of Learning were reviewed and updated by:

Norma J. Bonney, Kempsville High School, Virginia Beach City Public Schools
Vickie L. Inge, Mathematics Committee Member, Virginia Mathematics and Science Coalition
Anne F. Markwith, New Teacher Mentor, Gloucester County Public Schools
Cathy Nichols-Cocke, PhD, Fairfax High School, Fairfax County Public Schools
Caroline C. Wheeler, M.T., Secondary English, Richmond

The framework was edited and produced by the CTE Resource Center:

Leanne Forbes Tipton, Writer/Editor
Kevin P. Reilly, Administrative Coordinator

Michele Green-Wright, Specialist, Health and Medical Sciences and Related Clusters
Office of Career, Technical, and Adult Education
Virginia Department of Education

Copyright © 2018

Course Description

Suggested Grade Level: 10 or 11 or 12

Students explore opportunities in the healthcare field by developing basic skills common to several assisting careers. They study body structure and function, principles of health and disease, and an overview of the health and patient care system. Supervised work-based learning may be part of the course in health care settings and is managed by the health and medical sciences education teacher.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Task Essentials Table

- Tasks/competencies designated by plus icons (⊕) in the left-hand column(s) are essential
- Tasks/competencies designated by empty-circle icons (○) are optional
- Tasks/competencies designated by minus icons (⊖) are omitted
- Tasks marked with an asterisk (*) are sensitive.

8331	
Tasks/Competencies	
Functioning as a Member of the Healthcare Team	
⊕	Explain opportunities in the healthcare industry.
⊕	Identify the roles of healthcare team members.
⊕	Interpret the psychosocial aspects of patient/client care.
Demonstrating an Understanding of Legal and Ethical Considerations of Healthcare Team Members	
⊕	Identify signs of child, elder, and domestic abuse and neglect.
⊕	Apply concepts of Health Insurance Portability and Accountability Act of 1996 (HIPAA) legislation.
⊕	Identify scope of practice for the healthcare assistant and for other members of the healthcare team.
⊕	Describe legal implications of advanced directives.
⊕	Explore concepts of biomedical ethics.

<input checked="" type="radio"/>	Implement the practices of the Patient's Bill of Rights and the Resident's Bill of Rights.
Communicating within the Healthcare Setting	
<input checked="" type="radio"/>	Explain <i>communication</i> and its role in the healthcare industry.
<input checked="" type="radio"/>	Apply effective communication techniques.
<input checked="" type="radio"/>	Explain the purpose, parts, and information found in the medical record.
<input checked="" type="radio"/>	Interpret medical terminology and abbreviations.
Providing for Basic Health Needs	
<input type="radio"/>	Make unoccupied and occupied beds.
<input type="radio"/>	Bathe patient/client as prescribed in care plan.
<input type="radio"/>	Provide skin care.
<input type="radio"/>	Perform oral hygiene.
<input type="radio"/>	Provide perineal care, including catheter care.
<input type="radio"/>	Assist patient/client with use of bedpan or urinal.
<input type="radio"/>	Perform range-of-motion (ROM) exercises.
<input type="radio"/>	Position patient/client.
<input type="radio"/>	Transfer patient/client.
<input type="radio"/>	Assist patient/client in ambulation, including use of assistive devices.
<input type="radio"/>	Transport patient/client.
Incorporating Safety Procedures	
<input checked="" type="radio"/>	Explain how to provide a safe, clean, and comfortable environment for the patient/client.
<input checked="" type="radio"/>	Identify environmental safety hazards, prevention methods, and disaster plans.
<input checked="" type="radio"/>	Implement standard precautions and infectious disease control measures.
<input type="radio"/>	Assist with sterile techniques.
<input checked="" type="radio"/>	Identify sterilization and sanitation procedures.
<input checked="" type="radio"/>	Identify laws concerning hazardous materials.
<input checked="" type="radio"/>	Demonstrate use of personal protective equipment (PPE).
<input checked="" type="radio"/>	Describe facility admission, transfer, and discharge processes.
<input checked="" type="radio"/>	Demonstrate proper body mechanics.
Understanding Body Systems and Disorders	
<input checked="" type="radio"/>	Identify structures and functions of the integumentary system.
<input checked="" type="radio"/>	Identify major disorders of the integumentary system.
<input checked="" type="radio"/>	Identify structures and functions of the circulatory system.
<input checked="" type="radio"/>	Identify major disorders of the circulatory system.
<input checked="" type="radio"/>	Identify structures and functions of the respiratory system.
<input checked="" type="radio"/>	Identify major disorders of the respiratory system.
<input checked="" type="radio"/>	Identify structures and functions of the nervous system.
<input checked="" type="radio"/>	Identify major disorders of the nervous system.
<input checked="" type="radio"/>	Identify structures and functions of the musculoskeletal system.
<input checked="" type="radio"/>	Identify major disorders of the musculoskeletal system.
<input checked="" type="radio"/>	Identify structures and functions of the reproductive system.
<input checked="" type="radio"/>	Identify major disorders of the reproductive system.
<input checked="" type="radio"/>	Identify structures and functions of the urinary system.
<input checked="" type="radio"/>	Identify major disorders of the urinary system.

<input checked="" type="checkbox"/>	Identify structures and functions of the gastrointestinal system.
<input checked="" type="checkbox"/>	Identify major disorders of the gastrointestinal system.
<input checked="" type="checkbox"/>	Identify structures and functions of the endocrine system.
<input checked="" type="checkbox"/>	Identify major disorders of the endocrine system.
Assisting with Patient/Client Procedures	
<input checked="" type="checkbox"/>	Report patient/client information and observations.
<input checked="" type="checkbox"/>	Measure routine vital signs (blood pressure; apical pulse; radial pulse; oral, aural, temporal artery; rectal, and axillary temperature).
<input checked="" type="checkbox"/>	Measure and record intake and output.
<input type="checkbox"/>	Explain anti-embolic stockings.
<input checked="" type="checkbox"/>	Explain height and weight measurement for all age groups.
<input type="checkbox"/>	Assist with the application and removal of braces, supports, and prosthetic devices.
<input type="checkbox"/>	Assist with ostomy care.
<input checked="" type="checkbox"/>	Explain routine specimen collection.
<input checked="" type="checkbox"/>	Describe methods of assisting a patient/client with bladder and bowel training.
<input checked="" type="checkbox"/>	Explain how to assist the incontinent patient/client.
<input checked="" type="checkbox"/>	Explain how to assist the patient/client receiving oxygen therapy.
<input checked="" type="checkbox"/>	Explain how to assist with postmortem care.
Meeting Nutritional Needs	
<input checked="" type="checkbox"/>	Identify the food groups according to United States Department of Agriculture (USDA) guidelines.
<input checked="" type="checkbox"/>	Identify common therapeutic diets.
<input checked="" type="checkbox"/>	Explain how to care for the patient/client with a feeding tube.
<input checked="" type="checkbox"/>	Explain how to assist patient/client with eating and hydration.
<input checked="" type="checkbox"/>	Measure fluid and food intake and output (as required by the Virginia Board of Nursing regulation).
<input checked="" type="checkbox"/>	Feed a client/resident/patient (as required by the Virginia Board of Nursing regulation).
Identifying First Aid Concepts	
<input checked="" type="checkbox"/>	Identify general first aid concepts.
<input checked="" type="checkbox"/>	Control external bleeding.
<input checked="" type="checkbox"/>	Administer cardiopulmonary resuscitation (CPR) and use of Automated External Defibrillator (AED).
Understanding Life Span Development	
<input checked="" type="checkbox"/>	Describe major stages of growth and development, including normal personality development.
<input checked="" type="checkbox"/>	Describe positive coping behavior in response to stress.
<input checked="" type="checkbox"/>	Identify communication concepts across the lifespan.
<input checked="" type="checkbox"/>	Identify physical and psychological signs and symptoms of approaching death.
Obtaining Employment	
<input checked="" type="checkbox"/>	Evaluate health career options.
<input checked="" type="checkbox"/>	Prepare for job opportunities in the healthcare field.
<input checked="" type="checkbox"/>	Explain job resignation procedures.
Describing the Opioid Crisis	
<input checked="" type="checkbox"/>	Describe the history and current state of the opioid crisis in the United States.

+	Describe the history and current state of the opioid crisis in Virginia.
+	Define the pharmacological components and common uses of opioids.
Examining the Key Factors of Drug Addiction	
+	Examine the science of addiction.
+	Explain prevention and early intervention strategies.
+	Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).
+	Describe the treatment models of addiction therapy.
+	Describe the medication management antidote used to prevent fatal opioid overdoses.
Understanding Pain Management Protocols	
+	Explain the science of physiological and mental pain.
+	Describe the diagnostic tools used in developing pain management plans.
+	Describe pain treatment options available to various populations of patients.
+	Describe the effects of opioid dependency on the human body systems.
+	Explain the mechanism and physical effects of opioids on the human body.
+	Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.
+	Describe the withdrawal and tapering side effects of opioid use.
+	Describe storage and disposal options for opioids.
+	Explain community resources for education about opioid use.
Working with Patients and Caregivers	
+	Describe key communication topics involving opioids for patients.
+	Describe communication topics for caregivers and family members.

Legend: + Essential ○ Non-essential ⊖ Omitted

Curriculum Framework

Functioning as a Member of the Healthcare Team

Task Number 39

Explain opportunities in the healthcare industry.

Definition

Explanation should include

- the health science career pathways
- information regarding health sciences as one of the fastest growing career fields
- possible settings for healthcare employment in each career pathway.

Process/Skill Questions

- What are the health science career pathways?
- What are examples of specific careers in each career pathway?
- What are the educational and certification requirements for entry-level healthcare careers?
- What are the educational requirements for advancement within the healthcare fields?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Leadership Events

- Medical Photography

Teamwork Events

- Health Career Display

Task Number 40

Identify the roles of healthcare team members.

Definition

Identification should include differentiating responsibilities of each member.

Process/Skill Questions

- What is meant by multidisciplinary as it relates to the healthcare team?
- What occupations are represented in a healthcare team?
- How would you describe the basic duties of members of the healthcare team?
- How would you describe the role of the health assistant?
- How would you summarize the responsibilities of each healthcare team member in assessing, planning, implementing, and evaluating a patient's/client's care?

- What national organizations are designed to meet the needs of the health assisting professions?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
 - Medical Terminology
-

Task Number 41

Interpret the psychosocial aspects of patient/client care.

Definition

Interpretation should include

- Maslow's hierarchy of human needs
- holistic, cultural, and religious aspects impacting patient/client care.

Process/Skill Questions

- What are the five levels of Maslow's hierarchy of needs?
- What is meant by holistic care?
- What are examples of cultural and religious aspects of care, and why are they important?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Transcultural Health Care

Teamwork Events

- HOSA Bowl
-

Demonstrating an Understanding of Legal and Ethical Considerations of Healthcare Team Members

Task Number 42

Identify signs of child, elder, and domestic abuse and neglect.

Definition

Identification should include

- types of abuse and neglect (e.g., physical, sexual, psychological, financial)
- signs of child, elder, and domestic abuse
- mandatory abuse reporting obligations.

Process/Skill Questions

- What is the difference between abuse and neglect?
- How would you describe the types of abuse and neglect (e.g., physical, sexual, psychological, financial)?
- What are signs of child, elder, and domestic abuse?
- How would you report suspected abuse?
- What might be the consequences of not reporting abuse?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Medical Law and Ethics

Task Number 43

Apply concepts of Health Insurance Portability and Accountability Act of 1996 (HIPAA) legislation.

Definition

Application should include following the guidelines of privileged/confidential communication procedures, including social media guidelines.

Process/Skill Questions

- What is considered privileged/confidential information?
- What are the HIPAA procedures for release of information?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Medical Law and Ethics

Teamwork Events

- HOSA Bowl
-

Task Number 44

Identify scope of practice for the healthcare assistant and for other members of the healthcare team.

Definition

Identification should include the scope of practice for healthcare careers, such as

- nursing
- pharmacy
- dental
- radiology
- physical therapy
- medicine.

Process/Skill Questions

- Where would you find information regarding healthcare professionals' scope of practice?
- What are the implications of operating outside your scope of practice?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Medical Law and Ethics

Teamwork Events

- HOSA Bowl
-

Task Number 45

Describe legal implications of advanced directives.

Definition

Description should include

- do-not-resuscitate (DNR) order
- medical power of attorney (MPOA)
- living wills.

Process/Skill Questions

- What are the differences between a living will and a medical power of attorney?
- What is a DNR order?
- What documentation is required for a DNR?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Medical Law and Ethics

Teamwork Events

- Biomedical Debate
- HOSA Bowl

Task Number 46

Explore concepts of biomedical ethics.

Definition

Exploration should include

- organ donation
- stem cell research
- genetic engineering
- end-of-life issues.

Process/Skill Questions

- What are the procurement procedures for organ donation?
- What ethical issues are involved with stem cell research? Genetic engineering? End-of-life issues?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Medical Law and Ethics

Teamwork Events

- Biomedical Debate
- HOSA Bowl

Task Number 47

Implement the practices of the Patient's Bill of Rights and the Resident's Bill of Rights.

Definition

Implementation should include

- the rationale for and importance of having a Patient's/Resident's Bill of Rights
- a list of the elements of the Patient's/ Resident's Bill of Rights, as mandated by Omnibus Budget Reconciliation Act of 1987 (OBRA) regulations
- the role of the health assistant in upholding the rights of patients/clients.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- Why is a patient's/client's privacy important?
- How can a patient's/client's privacy be maintained?
- What might be the consequences of violating OBRA regulations?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Medical Law and Ethics

Teamwork Events

- HOSA Bowl

Communicating within the Healthcare Setting

Task Number 48

Explain *communication* and its role in the healthcare industry.

Definition

Explanation should include

- healthcare team communication
- patient/client, family, and interpersonal communication.

Process/Skill Questions

- What communication is necessary for maintaining continuity of care?
- How can the health assistant facilitate communication among the patient, the patient's family, and the healthcare team?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
 - Medical Terminology
 - Knowledge Test: Transcultural Health Care
-

Task Number 49

Apply effective communication techniques.

Definition

Application should include

- written
- verbal
- nonverbal
- strategies to overcome barriers to communication
- telephone etiquette
- reporting
- filing procedures.

Process/Skill Questions

- What are examples of barriers to communication (i.e., cultural, physical, environmental, emotional, psychological, personal, language)?
- What are strategies to overcome these barriers?
- What are the rules for answering phones?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Transcultural Health Care

Task Number 50

Explain the purpose, parts, and information found in the medical record.

Definition

Explanation should include

- contents
- permission to access
- legal implications of documentation
- electronic medical records (EMRs)
- 24-hour clock.

Process/Skill Questions

- Who has ownership of patient/client records?
- What are the components of the medical record?
- How is the care plan used?
- How do you correct an error made in medical records?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Task Number 51

Interpret medical terminology and abbreviations.

Definition

Interpretation should include

- word parts
- anatomical references
- field-specific abbreviations.

Process/Skill Questions

- Why is it important to understand medical terminology?
- How are medical terms formed?
- What is the anatomical position?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Providing for Basic Health Needs

Task Number 52

Make unoccupied and occupied beds.

Definition

Making an unoccupied bed should include

- selection of appropriate linens
- use of proper body mechanics
- infection control measures throughout the procedure.

Making an occupied bed should include

- selection of appropriate linens
- patient's/client's safety and privacy at all times
- use of proper body mechanics
- infection control measures throughout the procedure.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- When would you change the bedspread on a bed?
- What is the purpose of wearing gloves when stripping used bed linens from the bed?
- Where do you put soiled linens?
- What linens are needed, in order of use, to make an unoccupied bed?
- When are side rails used during the making of an occupied bed?
- How is patient's/client's privacy protected during the making of an occupied bed?
- How do you protect yourself from back injuries when performing this procedure?
- Why would you move a patient/client closer to the edge of the bed nearest you before turning him/her over on his/her side?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Task Number 53

Bathe patient/client as prescribed in care plan.

Definition

Bathing should include following facility guidelines for a complete shower, whirlpool bath, a partial shower, and a bed bath.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- How would you distinguish the different types of baths, such as cleansing, bed bath, medicated, and therapeutic?
- How would you administer a bed bath?
- How would you assist a patient/client with a tub bath?
- How would you assist a patient/client with a complete or partial shower?
- How would you assist a patient/client with a sitz bath?
- How would you assist a patient/client with a whirlpool bath?
- Why is it important to follow the guidelines for bathing a patient/client?
- What might be the consequences of not following the guidelines?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Task Number 54

Provide skin care.

Definition

Provision includes monitoring skin breakdown and should also include

- measures for maintaining skin integrity
- explanation of measures to prevent skin breakdown
- identification of stages of skin breakdown
- explanation of treatment of skin breakdown.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What methods would you use to inspect a patient's/client's skin?
- What mechanical aids are used to prevent skin breakdown? How are they used?
- What conditions require reporting a developing skin breakdown?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Task Number 55

Perform oral hygiene.

Definition

Performance should include

- flossing
- brushing teeth according to the *Nurse Aide Candidate Handbook*
- using mouthwash
- giving mouth care.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What situations require you to perform oral hygiene?
- What are the steps in mouth care for the alert patient/client? For the unconscious patient/client?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Task Number 56

Provide perineal care, including catheter care.

Definition

Provision should include following guidelines for

- male and female perineal care
- external catheter care.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- How often should you perform perineal care?
- What are the consequences of not performing perineal care? Of not performing it according to official guidelines?
- How often should a catheter be replaced?
- What are the steps for performing external catheter care?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
 - Personal Care
-

Task Number 57

Assist patient/client with use of bedpan or urinal.

Definition

Assistance should include

- maintaining privacy
- using communication methods appropriate to the situation
- following standard precautions
- documenting each use.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What is the need for privacy during use of the bedpan or urinal?
- What information needs to be communicated to the patient/client when using the bedpan or urinal?
- What information needs to be documented after bedpan or urinal use?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
 - Personal Care
-

Task Number 58

Perform range-of-motion (ROM) exercises.

Definition

Performance should include following guidelines and patient/client care plan for

- describing how ROM is assessed
- explaining precautions needed when performing ROM exercises
- displaying active and passive techniques
- employing stretching techniques
- describing adaptive exercise or activity options for patient/client with disabilities.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What are the benefits of stretching in a therapeutic setting?
- How can someone with limited mobility improve his/her ROM?
- What is the distinction among passive, active, and active-assist ROM?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
 - Personal Care
-

Task Number 59

Position patient/client.

Definition

Positioning should include turning patient and following guidelines and patient/client care plan for

- maintaining proper body alignment of patient/client
- positioning patient/client (e.g., supine, Fowlers, Semi-Fowlers, lateral, Sims', prone, logrolling).

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What safety precautions should the health assistant take when turning and positioning a patient/client?
- How would you describe the terms supine, Fowlers, Semi-Fowlers, lateral, Sims', prone, and logrolling?
- What assistive devices can be used when turning and positioning a patient/client?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Task Number 60

Transfer patient/client.

Definition

Transfer should include following guidelines and patient/client care plan for

- using transfer equipment (e.g., transfer belt, gait belt, lift, wheelchair, sliding board)
- transferring patient/client with various physical disabilities (e.g., one-sided weakness, paralysis)
- transferring patient/client in various activities of daily living (e.g., moving to and from bath/shower, toilet, car, chair)
- observing mechanical lift.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What should be communicated to a patient/client prior to and during a transfer?
- When would you use a sliding board to transfer a patient/client?
- What strategies can be used to avoid a fall during a transfer?
- How would you lower a patient/client safely to the floor in an emergency situation?
- When transferring a patient/client, why is it important to follow standard procedures exactly?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Task Number 61

Assist patient/client in ambulation, including use of assistive devices.

Definition

Assistance should include following guidelines and patient/client care plan for

- assisting patients/clients in safe ambulation using various equipment (e.g., walkers, canes, crutches)
- adjusting assistive devices
- implementing fall prevention guidelines.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What factors may affect a patient's/client's ability to ambulate?
- If a patient's/client's left leg is injured, in which hand should he/she use the cane? Why?
- How can the health assistant determine the adjustments needed for assistive devices?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
 - Personal Care
-

Task Number 62

Transport patient/client.

Definition

Transporting should include following guidelines and patient/client care plan for

- maneuvering manual wheelchair
- maneuvering motorized wheelchair
- adjusting wheelchair parts
- propelling wheelchair on different types of surfaces.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What environmental adaptations are available in the community to accommodate wheelchair users?
- How can a person in a wheelchair safely get in and out of a car? Go up a curb? Enter and use a public bathroom?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Incorporating Safety Procedures

Task Number 63

Explain how to provide a safe, clean, and comfortable environment for the patient/client.

Definition

Explanation should include

- various patient/client environments
- considerations involved with physical contact with patient/client
- control of noise, climate, odors, lighting, patient/client privacy
- operation of various types of beds
- safety issues pertaining to various healthcare fields and environments.

(Note: See [Department of Labor Bulletin](#) on the operation of patient/resident lifts/hoists by youths under the age of 18.)

(Note: See [Youth@Work: Talking Safety Virginia](#), produced by the National Institute for Occupational Safety and Health (OSHA))

Process/Skill Questions

- How would you plan and implement care to prevent falls?
- When is it appropriate to use medical restraints?
- How would you establish a safe and controlled environment for your patient/client?
- How would you prioritize the steps to maintain a safe and controlled environment for your patient/client?
- How would you document safety procedures?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
 - Medical Terminology
 - Knowledge Test: Human Growth and Development
-

Task Number 64

Identify environmental safety hazards, prevention methods, and disaster plans.

Definition

Identification should include

- issues involving fire
- disaster training
- hazardous and non-hazardous waste disposal
- roles and behaviors of all people involved in emergency situations
- electrical safety standards.

Process/Skill Questions

- What sequence of events should you implement when responding to a fire in a healthcare facility?
- How would you respond to an emergency?
- How can you identify areas with a high potential for fire? What are the three types of fire extinguishers?

- How would you differentiate among the use and operation of each type?
- How would you differentiate between disposal of hazardous and non-hazardous waste materials?
- How would you differentiate among the roles of student, instructor, and staff in emergency situations?
- What might be the consequences of not following all safety precautions and procedures?
- What might be the consequences of not documenting all safety precautions and procedures?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Task Number 65

Implement standard precautions and infectious disease control measures.

Definition

Implementation should include

- use of standard precautions
- transmission-based precautions
- blood-borne pathogen standards
- hand hygiene
- medical asepsis.

Process/Skill Questions

- How would you explain general principles of asepsis?
- How would you explain and practice standard precautions?
- How would you differentiate between pathogenic and non-pathogenic organisms?
- What are the links in the chain of infection?
- How can disease transmission be prevented?

- What are the steps in hand hygiene?

HOSA Competitive Events (High School)

Health Science Events

- Medical Terminology
- Knowledge Test: Pathophysiology

Teamwork Events

- HOSA Bowl

Emergency Preparedness Events

- Epidemiology
-

Task Number 66

Assist with sterile techniques.

Definition

Assistance should include

- donning and removing sterile gloves
- setting up a sterile field
- maintaining a sterile field.

Process/Skill Questions

- In what medical situations would various types of personal protective equipment (PPE) be necessary?
- Why must all PPE be donned and removed according to a prescribed technique?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pharmacology

Task Number 67

Identify sterilization and sanitation procedures.

Definition

Identification should include

- sterilization methods
- sanitation protocols.

Process/Skill Questions

- Why are there different categories for handling medical waste?
- How do Occupational Safety and Health Administration (OSHA) blood-borne pathogens standards benefit health care workers? How do they benefit patients/clients?
- What are the consequences of not following OSHA guidelines?
- How do sterilization methods differ according to the type of equipment or materials to be sterilized? Why are they different?
- What are the methods to maintain and assure sterility?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pathophysiology

Emergency Preparedness Events

- Epidemiology

Task Number 68

Identify laws concerning hazardous materials.

Definition

Identification should include

- Safety Data Sheets (SDS) process
- methods of hazardous materials disposals.

Process/Skill Questions

- How do the roles of the Centers for Disease Control and Prevention (CDC) and OSHA differ with regard to infection control?
- What type of information is reported to the CDC?
- How does OSHA contribute to a safe work environment?
- What penalties may occur if CDC and OSHA guidelines are not followed?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Task Number 69

Demonstrate use of personal protective equipment (PPE).

Definition

Demonstration should include

- circumstances that require use of PPE
- identification of types of PPE
- donning, removing, and disposing of PPE.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- In what medical situations would various types of PPE be necessary?
- Why must all PPE be applied and removed according to a prescribed technique?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
 - Personal Care
-

Task Number 70

Describe facility admission, transfer, and discharge processes.

Definition

Description should include procedures for

- admitting patient/client
- transferring patient/client
- discharging patient/client.

Process/Skill Questions

- What is the health assistant's role in admission procedures?
- What is the health assistant's role in discharge procedures?
- What is the health assistant's role in transfer procedures?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
 - Medical Terminology
-

Task Number 71

Demonstrate proper body mechanics.

Definition

Demonstration should include

- elements of body mechanics (e.g., base of support, proximity to load, minimal twisting, avoidance of repetitive motions, use of large muscles, posture).
- techniques of standing, sitting, and moving for personal protection of the health assistant
- techniques for moving, transferring, and lifting patient/client both in bed and chair.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What types of devices are used to help transfer and lift patients/clients?
- Why is good posture important for the health assistant?
- What are the potential consequences of poor body mechanics?
- What principles of body mechanics should a health assistant keep in mind to protect himself or herself from injury while transferring, lifting, turning, and/or positioning a patient/client?
- How can a health care worker's knowledge and application of proper body mechanics be important to patient/client safety?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Understanding Body Systems and Disorders

Task Number 72

Identify structures and functions of the integumentary system.

Definition

Identification should include

- names and descriptions of the layers of the skin
- functions of the skin
- location and functions of the appendages of the skin.

Process/Skill Questions

- What are the functions of the skin?
- What are the layers of the skin, and how are they similar/different?
- How can the structures of the skin be located and described?
- What is the function of each type of structure?
- What would you recommend to minimize the effects of aging on the integumentary system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 73

Identify major disorders of the integumentary system.

Definition

Identification should include

- use of diagnostic tests
- signs and symptoms
- treatment and prognosis.

Process/Skill Questions

- What are some of the diagnostics tests used for identification of disorders/diseases?
- What are the risk factors for diseases/disorders?
- What are the major diseases/disorders of the system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pathophysiology

Task Number 74

Identify structures and functions of the circulatory system.

Definition

Identification should include

- types of blood cells, cardiovascular structures, and functions
- oxygenated vs. deoxygenated blood.

Process/Skill Questions

- What are the functions of the circulatory system?
- What are the names of the major arteries and veins in the body?
- How are the structures of an artery, vein, and capillary different/similar?
- How would you differentiate between vessels carrying oxygenated vs. those carrying deoxygenated blood?
- How would you describe gas exchanges in the capillaries?
- What is blood pressure?
- What are the factors that contribute to the distribution of blood flow?
- What are the factors that affect the pulse rate?
- What is shock?
- What steps can be taken to minimize the effects of aging on blood pressure and circulation?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 75

Identify major disorders of the circulatory system.

Definition

Identification should include

- use of diagnostic tests
- signs and symptoms
- treatment and prognosis.

Process/Skill Questions

- What are some of the diagnostic tests used for identification of disorders/diseases?
- What are the risk factors for diseases/disorders?
- What are the major diseases/disorders of the system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pathophysiology

Teamwork Events

- HOSA Bowl
-

Task Number 76

Identify structures and functions of the respiratory system.

Definition

Identification should include

- external and internal respiration
- structure and function of organs of the respiratory system.

Process/Skill Questions

- What is the process of pulmonary ventilation?
- How would you differentiate between external and internal respiration?
- What are the structure and function of each organ of the respiratory system?
- How would you explain the gas exchange among lungs, blood, tissues, and cells?
- How are oxygen and carbon dioxide transported in the blood?
- What are the factors that regulate respiration?
- How does aging affect the respiratory system?
- What steps can be taken to reduce the effects of aging on the respiratory system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 77

Identify major disorders of the respiratory system.

Definition

Identification should include

- use of diagnostic tests

- signs and symptoms
- treatment and prognosis.

Process/Skill Questions

- What are some of the diagnostic tests used for identification of disorders/diseases?
- What are the risk factors for diseases/disorders?
- What are the major diseases/disorders of the system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pathophysiology

Teamwork Events

- HOSA Bowl
-

Task Number 78

Identify structures and functions of the nervous system.

Definition

Identification should include

- discussion of central and peripheral systems
- special senses.

Process/Skill Questions

- What are the two major divisions of the nervous system? What are their components?
- How would you compare the functions of the central and peripheral systems, including the autonomic nervous system?
- How would you describe the structure and function of a neuron?
- What is a synapse?
- What are the classifications of neurons?
- How would you classify the role of myelin in nerve conduction?
- How would you describe the structure and functions of the spinal cord?

- What is dermatome, and how can it be explained in relation to spinal cord and/or spinal nerve function?
- What are the different divisions of the autonomic nervous system? What are the effects of each on the human body?
- What are the different structures and functions of the brain, including the blood-brain barrier?
- What are the three subdivisions of the brain stem? Where are they located? What is the function of each?
- What are the names and descriptions of the three different meninges, and where are they located?
- What effect does aging have on the nervous system?
- What can be done to reduce the effects of aging on the nervous system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting

Teamwork Events

- HOSA Bowl

Task Number 79

Identify major disorders of the nervous system.

Definition

Identification should include

- use of diagnostic tests
- signs and symptoms
- treatment and prognosis.

Process/Skill Questions

- What are some of the diagnostic tests used for identification of disorders/diseases?

- What are the risk factors for diseases/disorders?
- What are the major diseases/disorders of the system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pathophysiology

Teamwork Events

- HOSA Bowl
-

Task Number 80

Identify structures and functions of the musculoskeletal system.

Definition

Identification should include

- two divisions of the skeleton
- types, structures, functions, and formation of bones
- three types of muscle tissue, their characteristics, and their functions.

Process/Skill Questions

- What is the basic unit of muscle tissue?
- How would you distinguish among the three types of muscle tissue, and how would you summarize the functions of each type?
- What are the major muscles of the body, and where are they located?
- How are muscles attached to bones?
- How would you differentiate between antagonistic muscles and synergistic muscles?
- What is the role of the nervous system in muscle function?
- What are the energy sources for muscle contraction?
- What would you recommend to minimize the effects of aging on the muscular system?
- How are bones formed?
- What are the functions of bones?
- What are the types of joints and their actions?

- How are bones connected to bones?
- How are muscles attached to bones?
- How do muscles and bones work together for movement of the human body?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Task Number 44

Identify major disorders of the musculoskeletal system.

Definition

Identification should include

- use of diagnostic tests
- signs and symptoms
- treatment and prognosis.

Process/Skill Questions

- What are some of the diagnostic tests used for identification of disorders/diseases?
- What are the risk factors for diseases/disorders?
- What are the major diseases/disorders of the system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pathophysiology

Teamwork Events

- HOSA Bowl
-

Task Number 82

Identify structures and functions of the reproductive system.

Definition

Identification should include

- the names and locations of the major structures of the male and female systems
- the basic functions of the two systems
- the basic responsibility of each structure.

Process/Skill Questions

- What are the structures of the male and female reproductive systems?
- What are the functions of the male and female reproductive systems?
- How does the female reproductive system change during pregnancy?
- What effects does aging have on the reproductive system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 83

Identify major disorders of the reproductive system.

Definition

Identification should include

- use of diagnostic tests
- signs and symptoms
- treatment and prognosis.

Process/Skill Questions

- What are some of the diagnostic tests used for identification of disorders/diseases?
- What are the risk factors for diseases/disorders?
- What are the major diseases/disorders of the system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pathophysiology

Teamwork Events

- HOSA Bowl

Task Number 84

Identify structures and functions of the urinary system.

Definition

Identification should include

- related organs
- male and female urinary systems
- role of the kidneys
- composition of urine.

Process/Skill Questions

- What organs comprise the urinary system?
- What are the functions of each organ comprising the urinary system?
- How would you differentiate between the male and female urinary systems?
- What factors affect kidney function and urine formation?
- How do the kidneys regulate water balance?
- How would you describe the formation of urine?

- What hormones are associated with the urinary system?
- How is rennin (chymosin) related to blood pressure?
- What are the normal characteristics of urine?
- What effects does aging have on the urinary system?
- What can be done to reduce the effects of aging on the urinary system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Task Number 85

Identify major disorders of the urinary system.

Definition

Identification should include

- use of diagnostic tests
- signs and symptoms
- treatment and prognosis.

Process/Skill Questions

- What are some of the diagnostic tests used for identification of disorders/diseases?
- What are the risk factors for diseases/disorders?
- What are the major diseases/disorders of the system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Knowledge Test: Pathophysiology

Health Professions Events

- Nursing Assisting

Teamwork Events

- HOSA Bowl
-

Task Number 86

Identify structures and functions of the gastrointestinal system.

Definition

Identification should include

- organs of the digestive tract, structures, and functions
- associated structures of digestion.

Process/Skill Questions

- What are the organs of the digestive tract, and how could you describe their function and location?
- How would you identify and describe the structures and functions of the accessory organs of digestion?
- How would you describe the mechanical and chemical steps in the digestion process?
- Where would you locate villi? How would you describe villi and explain their function in absorption?
- What are mechanisms that aid in the maintenance of blood sugar?
- How would you differentiate among carbohydrate, protein, and fat digestion and metabolism?
- What is the role of the hypothalamus in the regulation of food intake?
- What are other functions of the liver?
- What effect does aging have on the digestive system?
- What steps can be taken to reduce the effects of aging on the digestive system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 87

Identify major disorders of the gastrointestinal system.

Definition

Identification should include

- use of diagnostic tests
- signs and symptoms
- treatment and prognosis.

Process/Skill Questions

- What are some of the diagnostic tests used for identification of disorders/diseases?
- What are the risk factors for diseases/disorders?
- What are the major diseases/disorders of the system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pathophysiology

Teamwork Events

- HOSA Bowl
-

Task Number 88

Identify structures and functions of the endocrine system.

Definition

Identification should include

- distinction between endocrine and exocrine gland
- functions of hormones.

Process/Skill Questions

- What key factors differentiate endocrine and exocrine glands?
- Where are the endocrine glands?
- What are the functions of hormones?
- What mechanisms control hormone secretions?
- What is the master gland? Why is it called the master gland?
- How would you explain the control of the hypothalamus over the anterior and posterior pituitary gland?
- What is the relationship between the endocrine system and the nervous system, and how do they work together to control and coordinate the body?
- What effect does aging have on the endocrine system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Task Number 89

Identify major disorders of the endocrine system.

Definition

Identification should include

- use of diagnostic tests
- signs and symptoms
- treatment and prognosis.

Process/Skill Questions

- What are some of the diagnostic tests used for identification of disorders/diseases?
- What are the risk factors for diseases/disorders?
- What are the major diseases/disorders of the system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pathophysiology

Teamwork Events

- HOSA Bowl

Assisting with Patient/Client Procedures

Task Number 90

Report patient/client information and observations.

Definition

Reporting should include

- routine care
- subjective and objective
- data changes in patient/client status
- protocol to report changes.

Process/Skill Questions

- What are three examples of a subjective observation? Objective observation? How would you record each?
- What are three examples of possible changes in patient status? To whom would you report these, and what documentation might be required?
- What tasks are included in routine morning care? Hour of sleep (H.S.) care?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 91

Measure routine vital signs (blood pressure; apical pulse; radial pulse; oral, aural, temporal artery; rectal, and axillary temperature).

Definition

Measuring should include recording and should be performed according to industry standards.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- How would you describe the anatomy of the circulatory system?
- What are the definitions of *blood pressure (systolic, diastolic)*, *apical pulse*, *radial pulse*, *oral temperature*, *rectal temperature*, *axillary temperature*, and *tympanic temperature*?
- When do vital signs need to be measured and recorded?
- What are the normal ranges for blood pressure, pulse, respiration, and temperature?
- What are the factors that influence blood pressure, pulse, and temperature?
- What are the proper techniques for taking blood pressure, pulse, respiration, and temperature?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Teamwork Events

- HOSA Bowl
-

Task Number 92

Measure and record intake and output.

Definition

Measuring and recording should include

- use of the metric system and U.S. customary measure, including conversion between systems
- procedure for recording measurement, according to agency documentation guidelines
- techniques for measuring fluid intake
- techniques for measuring fluid output
- techniques for measuring food intake.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- Why is the metric system used for measurement and documentation of intake and output?
- Why are accurate intake and output measurements essential?
- How would you measure output from a Foley catheter?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting

- Personal Care

Teamwork Events

- HOSA Bowl
-

Task Number 93

Explain anti-embolic stockings.

Definition

Explanation should include

- purpose of anti-embolic stockings
- turning inside out down to the heel
- applying without twists and wrinkles.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What is the terminology related to anti-embolic stockings?
- In what situations are anti-embolic stockings necessary?
- What observations should be recorded and reported before applying anti-embolic stockings?
- What are the signs of impaired circulation?
- How do you determine the correct size of stockings?
- What is the procedure for applying anti-embolic elastic stockings?
- Why is it important to have anti-embolic stockings free of wrinkles and twists?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting

- Personal Care
-

Task Number 94

Explain height and weight measurement for all age groups.

Definition

Explanation should include

- purpose of accurate height and weight measurement using metric, U.S. customary units, and conversion formulas
- use of chair, bed, physician's and digital scales for measuring height using metric, U.S. customary units, and conversion formulas.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- How do you convert U.S. customary units to metric measurements and vice versa?
- What is the procedure for obtaining height and weight?
- What type of scales would be used for a patient/client who is restricted to a bed? Who cannot stand?
- Why is it important for patients/clients to be weighed at the same time each day?
- Why is it important to document changes in weight? Where would you document it?
- Who would you notify of significant changes in weight?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
 - Personal Care
-

Task Number 95

Assist with the application and removal of braces, supports, and prosthetic devices.

Definition

Assistance should include differentiation of prosthetic and orthotic devices.

Process/Skill Questions

- What is the difference between a prosthetic and an orthotic device?
- Why is it important that these devices are applied correctly?
- Where would you find directions about how devices are to be applied?
- What are the signs of impaired circulation?
- What are the signs of skin breakdown?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 96

Assist with ostomy care.

Definition

Assistance should include

- identification of different types of ostomies
- skin care
- care and emptying of appliance
- description of output.

Process/Skill Questions

- Why does the location of the ostomy determine the consistency of the stool?
- What factors are important to note?
- What are the signs and symptoms of skin breakdown around the ostomy site?
- Why is it important to maintain skin integrity, and how would you do this?
- How often should ostomy devices be changed?
- How often should the ostomy bag be emptied, and how would you do this?
- What documentation is required for ostomy care?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 97

Explain routine specimen collection.

Definition

Explanation should include collection of

- urine
- stool
- sputum

according to industry standards.

Process/Skill Questions

- What procedure must be followed prior to collecting a clean-catch urine specimen?
- What are two other terms for a clean-catch urine specimen?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 98

Describe methods of assisting a patient/client with bladder and bowel training.

Definition

Description should include

- privacy
- need for individualized training
- rationale for bladder and bowel training
- causes of incontinence
- enema administration
- recording/reporting.

Process/Skill Questions

- What is the rationale for bladder and bowel training?
- What factors affect elimination in geriatric patients/clients?
- What is the need for individualized training of the patient/client?
- What are the implications of patience, empathy, and positive reinforcement to the success of bladder and bowel training?
- What is the importance of cooperation among members of the healthcare team to training success?
- What role does privacy play in the success of bladder and bowel training?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 99

Explain how to assist the incontinent patient/client.

Definition

Explanation should include

- defining *incontinence*
- understanding the psychological, physical, and social effects
- maintaining privacy
- caring for skin
- assessing the skin
- demonstrating accurate documentation
- using incontinence products.

Process/Skill Questions

- What are some of the psychological, physical, and social effects caused by urinary or fecal incontinence?
- How should nursing care of the incontinent patient/client be administered to maintain privacy?
- Why is it important to perform a skin assessment when giving incontinence care?
- Why is the frequency of incontinence care determined according to the patient's/client's needs?
- Why is it important to report and document incontinent episodes, care, and skin conditions?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Behavioral Health
- Knowledge Test: Transcultural Health Care

Teamwork Events

- HOSA Bowl

Task Number 100

Explain how to assist the patient/client receiving oxygen therapy.

Definition

Explanation should include

- oxygen safety
- recognition of poor oxygenation
- application of oxygen devices.

Process/Skill Questions

- What are different types of equipment/masks that patients/clients use to receive oxygen?
- What are the signs and symptoms of decreased or inadequate oxygenation?
- What actions are within your scope of work to perform?
- What would you do if you noticed a patient/client was having difficulty breathing?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 101

Explain how to assist with postmortem care.

Definition

Explanation should include following the steps of postmortem care:

- Use PPE during the procedure.
- Use each item included in the postmortem kit.
- Prepare the body according to facility guidelines.
- Know the psychological aspects of death and dying.

Process/Skill Questions

- Why is postmortem care done?
- What information is needed before postmortem care is performed?
- In the facility where you work, what is the procedure for postmortem care? How would you assist?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Meeting Nutritional Needs

Task Number 102

Identify the food groups according to United States Department of Agriculture (USDA) guidelines.

Definition

Identification should include information found on the USDA website.

See also ChooseMyPlate.gov.

Process/Skill Questions

- What are the food groups identified by USDA guidelines?

- How can information found at the USDA website be used to assist a patient/client with maintaining good nutrition?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Nutrition

Teamwork Events

- HOSA Bowl
-

Task Number 103

Identify common therapeutic diets.

Definition

Identification should include

- special diets based on care plans (e.g., liquid, soft, low-calorie, high-calorie, bland, diabetic)
- documentation of calorie counts and food intake studies
- ways to plan nutritious, therapeutic-diet menus in accordance with the patient's/client's care plan
- the purpose of therapeutic diets.

Process/Skill Questions

- Why should common therapeutic diets be understood?
- When a care plan specifies a special therapeutic diet (e.g., liquid, soft, low-calorie, high-calorie, bland, diabetic), how can the health assistant locate detailed helpful information about this diet?
- What is the role of nutritional supplements such as Ensure®? Can these products substitute for all other foods? Why, or why not?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Nutrition

Teamwork Events

- HOSA Bowl
-

Task Number 104

Explain how to care for the patient/client with a feeding tube.

Definition

Explanation should include

- types of enteral feeding tubes
- symptoms to report
- receiving enteral feedings.

Process/Skill Questions

- In what situations would a patient/client receive enteral feeding?
- What are the signs and symptoms of aspiration? What would you do if this occurred?
- What skin care is needed around the tube insertion site?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
-

Task Number 105

Explain how to assist patient/client with eating and hydration.

Definition

Explanation should include

- appealing environment (removal of urinal, bedpan, trash, etc.)
- serving and collecting diet trays
- setting up patient/client trays
- distributing nourishments
- distributing drinking water
- feeding patients/clients of all ages
- reporting compliance with stated meal plans.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What circumstances require the patient/client to be fed?
- How do you determine the percentage of a meal the patient/client consumed?
- How do you determine the correct diet that the patient/client needs?
- How can the patient/client be encouraged to eat?
- What are the methods used to assist the patient/client with eating difficulties (e.g., difficulty in swallowing, chewing, nausea)?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Teamwork Events

- HOSA Bowl

Task Number 106

Measure fluid and food intake and output (as required by the Virginia Board of Nursing regulation).

Definition

Measuring should include recording and

- measurement of fluid intake using milliliters
- measurement of fluid output using milliliters
- recording of percentage of food intake
- converting ounces to milliliters.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What is the correct position for the nurse aide and patient for feeding?
- How do you prepare a meal for the visually impaired client/resident/patient?
- When feeding the client/resident/patient, why is it better to use a spoon rather than a fork?
- What is the primary reason for encouraging the client/resident/patient to let him/her do as much as he/she can for himself/herself?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Teamwork Events

- HOSA Bowl

Task Number 107

Feed a client/resident/patient (as required by the Virginia Board of Nursing regulation).

Definition

Feeding a client/resident/patient of all ages should include

- verifying the meal ticket with the care plan
- validating the meal ticket by asking the client/resident/patient to state his/her name
- knowing his/her dietary restrictions/limitations
- reviewing the physician's order regarding dietary intake
- knowing the degree to which the client/resident/patient is able to assist with the feeding process.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- What is the correct position for the nurse aide and patient for feeding?
- How do you prepare a meal for the visually impaired client/resident/patient?
- When feeding the client/resident/patient, why is it better to use a spoon rather than a fork?
- What is the primary reason for encouraging the client/resident/patient to let him/her do as much as he/she can for himself/herself?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Nursing Assisting
- Personal Care

Teamwork Events

- HOSA Bowl

Identifying First Aid Concepts

Task Number 108

Identify general first aid concepts.

Definition

Identification should include

- description of the concept of first aid
- ways to recognize and respond to medical emergencies
- use of standard precautions
- controlling external bleeding
- administering first aid to a conscious or unconscious choking victim
- identifying signs and symptoms of shock, and responding procedures
- identifying first aid procedures for a musculoskeletal injury
- identifying signs and symptoms of heat and cold exposure, and responding procedures
- identifying signs and symptoms of poisoning, and responding procedures
- identifying signs and symptoms of a seizure, and responding procedures.
- identifying signs and symptoms of anaphylaxis, and responding procedures (epinephrine injection).

Process/Skill Questions

- Why are standard precautions and PPE required?
- What is the first step in responding to a medical emergency?
- How can poison control be contacted, and where should this number be recorded?
- Where can the health assistant access the guidelines of the American Heart Association (AHA) or American Red Cross?
- What is the first step in administering first aid to a conscious choking victim?
- What is the first step in administering first aid to an unconscious choking victim?
- What safety precautions should be observed? When?
- What are the signs of shock?
- What is the first step in responding to possible shock?
- What information should the health assistant gather for the emergency personnel?
- What is the first step in administering first aid for a musculoskeletal injury?
- What safety precautions should be observed? When?
- What are the signs of heat or cold exposure?
- What is the first step in responding to heat or cold exposure?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Emergency Preparedness Events

- CPR/First Aid
-

Task Number 109

Control external bleeding.

Definition

Control should include

- care for open wounds, including abrasions, lacerations, avulsions, and puncture wounds
- use of various types of bandages and compresses
- application of a pressure dressing
- care for a severed body part
- care for an embedded object
- care for a nosebleed
- care for a mouth, tooth, or lip injury.

Process/Skill Questions

- Why is it recommended to apply pressure to a wound?
- What measures other than pressure can be implemented to control bleeding?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Emergency Preparedness Events

- CPR/First Aid
-

Task Number 110

Administer cardiopulmonary resuscitation (CPR) and use of Automated External Defibrillator (AED).

Definition

Administration should include following the guidelines of the AHA or American Red Cross, in accordance with agency policy.

Process/Skill Questions

- Where can the health assistant access the guidelines of the AHA or American Red Cross?
- What is the first step in administering CPR?
- What safety precautions should be observed when performing CPR?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Emergency Preparedness Events

- CPR/First Aid
-

Understanding Life Span Development

Task Number 111

Describe major stages of growth and development, including normal personality development.

Definition

Description should include Erikson's theories of growth and development across the lifespan and their application to health care.

Process/Skill Questions

- What are Erikson's stages of growth and development?
- What are the milestones of each stage?
- How is this information important in dealing with patients/clients?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Human Growth and Development

Task Number 112

Describe positive coping behavior in response to stress.

Definition

Description should include

- classifications of stress
- methods of stress management for the healthcare worker
- methods of conflict resolution.

Process/Skill Questions

- What are the stages in the coping process?

- What are some physiological and psychological life events and losses that can cause stress?
- What is the role of culture in a patient's/client's emotional response to physical illness and hospitalization?
- What are the steps in conflict resolution?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Behavioral Health

Task Number 113

Identify communication concepts across the lifespan.

Definition

Identification should include the following age groups:

- infants
- children
- adolescents
- young adults
- middle adults
- older adults.

Process/Skill Questions

- How can communication barriers affect each age group?
- What are ways a health assistant can communicate with each age group?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Human Growth and Development

Teamwork Events

- HOSA Bowl
-

Task Number 114

Identify physical and psychological signs and symptoms of approaching death.

Definition

Identification should include

- Kübler-Ross stages of death and dying
- comfort measures.

For students taking the nurse aide credential at the end of the course, follow the Virginia Board of Nursing regulations: [Commonwealth of Virginia Regulations Governing Certified Nurse Aides, Virginia Board of Nursing](#).

Process/Skill Questions

- How could you determine the physical signs of approaching death, including loss of muscle tone, breathing difficulty, circulatory failure, and loss of senses (other than hearing)?
- How does hospice help with the needs of dying patients/clients?
- What is palliative care?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
 - Medical Terminology
 - Knowledge Test: Human Growth and Development
-

Obtaining Employment

Task Number 115

Evaluate health career options.

Definition

Evaluation should include

- Health Science career pathways
- various healthcare settings
- acute care
- long-term care
- home care
- outpatient.

Process/Skill Questions

- What are different types of health careers within each pathway?
- What career options are available in acute care, long-term care, home care, and outpatient facilities?
- What are some nontraditional jobs in health care?
- What are examples of entry-level positions in each pathway?

HOSA Competitive Events (High School)

Leadership Events

- Medical Photography

Teamwork Events

- Health Career Display

Task Number 116

Prepare for job opportunities in the healthcare field.

Definition

Preparation should include

- development of a career portfolio
- development of interviewing skills
- completion of a job application.

Process/Skill Questions

- What elements are included in a career portfolio?
- What pertinent information should be included in a résumé?
- Why are accuracy and neatness important in portfolio documents?
- When is it useful to include volunteer experiences?
- What are appropriate references?

HOSA Competitive Events (High School)

Leadership Events

- Interviewing Skills
- Job-Seeking Skills

Teamwork Events

- HOSA Bowl
-

Task Number 117

Explain job resignation procedures.

Definition

Explanation should include

- an oral or written resignation from the job
- exit interview
- a provision of ample time to find a replacement
- an offer to train the new employee replacement.

Process/Skill Questions

- How many weeks' notice must an employee give before resigning from a position?
- What should the employee express in a letter of resignation?

Describing the Opioid Crisis

Task Number 118

Describe the history and current state of the opioid crisis in the United States.

Definition

Description should include

- the relationship between opioid prescribing and illicit opioid use to overall opioid overdose deaths
- the prevalence of co-occurring mental health disorders
- the shift in attitudes in the 1990s toward pain management and use of opioids, including the role of pharmaceutical marketing
- the stigma associated with addiction and the changing view of addiction from a moral failing to a chronic, relapsing disease
- statistics, trends, and demographics surrounding the crisis
- population health and other public health aspects of the crisis, including its effects on family and neonates, as well as overall health costs.

Process/Skill Questions

- How are opioids created?
- Can opioids be safely prescribed to patients taking psychotropic drugs?
- How does society stereotype individuals with a history of drug addiction?
- What are the current trends that have contributed to the nationwide opioid crisis?
- How has the opioid epidemic affected emergency rooms and the first responder system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- Creative Problem Solving
- HOSA Bowl
- Public Service Announcement

Task Number 119

Describe the history and current state of the opioid crisis in Virginia.

Definition

Description should include

- the relationship between opioid prescribing and illicit opioid use to overall opioid overdose deaths
- the prevalence of co-occurring mental health disorders
- the shift in attitudes in the 1990s toward pain management and use of opioids, including the role of pharmaceutical marketing
- the stigma associated with addiction and the changing view of addiction from a moral failing to a chronic, relapsing disease
- statistics, trends, and demographics surrounding the crisis
- population health and other public health aspects of the crisis, including its effects on family and neonates, as well as overall health costs
- the Virginia Department of Health's [Declaration of a Public Health Emergency](#) on November 21, 2016
- proposed legislation to address the crisis in Virginia (i.e., [House Bill 2161](#) and [Senate Bill 1179](#), which require the secretary of health and human resources to convene a workgroup to establish educational guidelines for training healthcare providers in the safe prescribing and appropriate use of opioids)
- the development of curricula and educational standards regarding opioid addiction.

Resource: [The Opioid Crisis Among Virginia Medicaid Beneficiaries](#)

Process/Skill Questions

- What agencies participated in the governor's task meeting on the opioid crisis?
- What educational organizations will be tasked with providing opioid training to their students?
- What is the benefit of educating future medical professionals about opioid addiction?
- What is the current attitude in society about opioid use and addiction?
- How is the local community affected by the opioid epidemic?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- Creative Problem Solving
 - HOSA Bowl
 - Public Service Announcement
-

Task Number 120

Define the pharmacological components and common uses of opioids.

Definition

Definition should include

- plant-based opioids (e.g., opium from poppy seeds)
- names of legal and illegal opioids
- [heroin](#)
- names of the most common opioids
- [fentanyl](#)
- medical diagnoses and injuries associated with opioid prescriptions
- [commonly used terms](#).

Resource: [Prescription Pain Medications](#), National Institute on Drug Abuse for Teens

Process/Skill Questions

- For what illnesses are opioids commonly prescribed?
- What is the current medical protocol when opioids are prescribed?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing
-

Examining the Key Factors of Drug Addiction

Task Number 121

Examine the science of addiction.

Definition

Examination should include

- biopsychosocial aspects of addiction
- the role of endorphins and dopamine
- the role of religious beliefs
- behavioral aspects of addiction
- life cycle of addiction
- misuse of opioids.

Process/Skill Questions

- How will understanding the physiological absorption of opioids in the body provide a holistic assessment?
- What spiritual characteristics might be observed in the science of addiction?
- What are some genetic explanations for some family members being more prone to addiction?

Task Number 122

Explain prevention and early intervention strategies.

Definition

Explanation should include

- risk and protective factors in opioid addiction
- specific populations at risk of addiction
- motivational interviewing and other communication strategies
- naloxone co-prescribing
- roles of family and social institutions in prevention and early intervention.

Resources:

- [Prevention Tip Card](#), Office of the Attorney General of Virginia
- [Prescription Opioids: Even When Prescribed by a Doctor](#) (video), Centers for Disease Control and Prevention (CDC)

Process/Skill Questions

- What are the physiological characteristics of opioid addiction?
- What demographic is most affected by the opioid epidemic? What are some explanations for this?
- How can provision of naloxone and training in its use be sustained financially?
- What obligations do families and society as a whole have in preventing and providing early intervention related to drug addiction?

Task Number 123

Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).

Definition

Identification should include

- DSM-5 Criteria for Substance Use Disorders
- American Society of Addiction Medicine (ASAM) Criteria (i.e., The Six Dimensions of Multidimensional Assessment)
- CONTINUUM, The ASAM Criteria Decision Engine
- clinical and behavioral aspects of addiction
- practice-appropriate screening tools, including co-morbidity screening.

Process/Skill Questions

- What are DSM-5 and ASAM and what information do they provide to healthcare professionals?
- What are clinical and behavioral elements of addiction that should be recognized by healthcare professionals?
- Who is responsible for providing the necessary screening tools and training?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Behavioral Health
- Knowledge Test: Medical Law and Ethics

Health Professions Events

- Clinical Nursing
-

Task Number 124

Describe the treatment models of addiction therapy.

Definition

Description should include

- a recognition that addiction is a chronic disease
- evidence-based treatment models for addiction in general and opioid addiction in particular
- medication-assisted treatment
- the continuum of care in opioid addiction treatment
- how and when to make a referral for treatment
- the roles in an interdisciplinary addiction team
- the role of peers in the treatment of addiction
- the difference between a drug culture and recovery culture
- the management of patients in recovery, including factors contributing to relapse.

Process/Skill Questions

- How many treatment models exist for addiction therapy? Why is one model better than the other?
- What are the advantages of evidence-based treatments and models?
- What medication-assisted treatment programs are available? Who provides them?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Behavioral Health
- Knowledge Test: Medical Law and Ethics

Health Professions Events

- Clinical Nursing

Task Number 125

Describe the medication management antidote used to prevent fatal opioid overdoses.

Definition

Description should include

- availability and use of naloxone
- naloxone training (e.g., [REVIVE!](#))
- naloxone training agencies
- monitoring of concurrent prescriptions.

Resources:

- [Frequently Asked Questions about Naloxone](#), Virginia Department of Health
- [How to administer Narcan nasal spray](#), Adapt Pharma
- [How to prepare naloxone for administration](#), Virginia Department of Behavioral Health and Developmental Services

Process/Skill Questions

- What is naloxone?
- How much does naloxone cost with health insurance? How much does naloxone cost without health insurance?
- Who should receive naloxone training?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pharmacology

Understanding Pain Management Protocols

Task Number 126

Explain the science of physiological and mental pain.

Definition

Explanation should include

- definition of pain from the International Association for the Study of Pain (IASP)
- neurobiological basis of pain
- biopsychosocial model of pain
- types of pain (e.g., neuropathic)
- acute, sub-acute, and chronic pain, including pain generation
- spinal and brain modulation, behavioral adaptation and maladaptation, and the continuum from acute to chronic disabling pain
- the underlying science of pain relief.

Process/Skill Questions

- What is the IASP definition of pain?
- How can a medical professional get a patient to describe physiological pain?
- What assessment tools can be used to help patients describe physiological pain? How do tools differ for describing mental pain?
- How are pain and levels of pain categorized?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Nutrition
- Knowledge Test: Transcultural Health Care

Teamwork Events

- Community Awareness
- Creative Problem Solving
- HOSA Bowl

Task Number 127

Describe the diagnostic tools used in developing pain management plans.

Definition

Description should include

- pain-related health history and examination
- understanding the role of family in supporting individuals in need of pain management
- practice-appropriate screening tools that include aspects such as mood and function
- the use and limitations of pain scales
- differential diagnosis of pain and its placement on the pain continuum.

Resource: [Promoting Safer and More Effective Pain Management](#), CDC

Process/Skill Questions

- What are the Wong-Baker, LEGO, and Hospice assessment tools?
- How do pain assessment tools vary across the life span?
- When completing an assessment, is pain considered subjective or objective?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Nutrition
- Knowledge Test: Transcultural Health Care

Teamwork Events

- Community Awareness
- Creative Problem Solving
- HOSA Bowl

Task Number 128

Describe pain treatment options available to various populations of patients.

Definition

Description should include

- special populations in pain management, such as palliative/end-of-life care patients, patients with cancer, pediatric patients, and geriatric populations
- non-pharmacologic treatment of pain, including active care and self-care, evidence- and non-evidence-based approaches, and multimodal pain management
- non-opioid pharmacologic management of pain
- the challenges in discussing the psychological aspects of pain and the role of the central nervous system
- adverse drug event prevention for all pain medications
- the roles in an interdisciplinary pain management team
- the significance of issues such as anxiety, depression, and sleep deprivation in pain management
- the placebo effect
- goals and expectations in the treatment of pain, based on diagnosis and pain continuum
- when to make a pain referral and to whom.

Resources:

- [CDC Fact Sheet for Prescribing Opioids for Chronic Pain](#)
- [CDC Guidelines for Prescribing Opioids for Chronic Pain](#)

Process/Skill Questions

- What pain management resources are available for special populations?
- What are alternative forms of pain management?
- What role does the mind play in pain management?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Nutrition
- Knowledge Test: Transcultural Health Care

Teamwork Events

- Community Awareness
- Creative Problem Solving
- HOSA Bowl

Task Number 129

Describe the effects of opioid dependency on the human body systems.

Definition

Description should include the short- and long-term effects of opioids on the following:

- Nervous system
- Respiratory system
- Circulatory system
- Digestive system
- Skeletal system

Resource: [Drugs and Your Body](#), Scholastic

Process/Skill Questions

- How does the misuse of opioids affect nutrition and weight loss?
- How might opioid misuse be evident in a person's vital signs?
- How do opioids affect the brain as the control center for homeostasis?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Task Number 130

Explain the mechanism and physical effects of opioids on the human body.

Definition

Explanation should include the following:

- Mechanism of action and metabolism of opioids
- Development of tolerance, dependence, and addiction
- Health consequences of drug misuse
 - HIV, hepatitis, and other infectious diseases
 - Cancer
 - Cardiovascular effects
 - Respiratory effects
 - Gastrointestinal effects
 - Musculoskeletal effects
 - Kidney damage
 - Liver damage
 - Neurological effects
 - Hormonal effects
 - Prenatal effects
 - Other health effects
 - Mental health effects
 - Death
- Withdrawal
 - Causes
 - Timeframe (i.e., peaks of withdrawal symptoms)
 - Physical signs (e.g., nausea, diarrhea, vomiting, cold flashes)

Process/Skill Questions

- What are the short- and long-term effects of withdrawal dependence symptoms?
- How long can the human body function while exhibiting the symptoms of withdrawal?
- What are other medical conditions that may arise because of the symptoms of physical dependence?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl

Task Number 131

Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.

Definition

Explanation should include

- appropriate use of different opioids in various practice settings
- the interactions, risks, and intolerance of prescription opioids
- the role and effectiveness of opioids in acute, sub-acute, and chronic pain
- a reassessment of opioid use based on stage of pain
- contemporary treatment guidelines, best practices, health policies, and government regulations related to opioid use
- use of opioids in pain management of patients with substance abuse disorders, in recovery, and in palliative/end-of-life care.

Process/Skill Questions

- When should risk factors regarding opioids be reviewed with the patient?
- What are the options when treating patients with a history of substance abuse?
- What government regulations and policies are in place to improve the safe administration of opioids?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- Creative Problem Solving
- HOSA Bowl

Task Number 132

Describe the withdrawal and tapering side effects of opioid use.

Definition

Description should include

- characteristics of acute and protracted withdrawal from opioid dependence or addiction
- tapering
- pain contracts or agreements.

Process/Skill Questions

- What are the stages of withdrawal in opioid abuse transition?
- What medications might be needed in the withdrawal stage?
- What information should be included in the pain management contract?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing

Task Number 133

Describe storage and disposal options for opioids.

Definition

Description should include

- medicine take-back options (e.g., [National Drug Take Back Day](#))
- disposal in the household trash and flushing certain potentially dangerous medicines down the toilet.

Resources:

- [Disposal of Unused Medicines: What You Should Know](#), Food and Drug Administration (FDA)
- [Prescription Drug Abuse and Tips for Proper Disposal](#), Office of the Attorney General of Virginia

Process/Skill Questions

- How should medications be stored in the house?
- What is National Prescription Drug Take Back Initiative?
- What is the *black box*?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing

Task Number 134

Explain community resources for education about opioid use.

Definition

Explanation should include key components of and resources for patient education in the use of opioids, including

- risks
- benefits
- side effects
- tolerance
- signs of sedation or overdose
- naloxone, including its storage and disposal.

Process/Skill Questions

- What resources for opioid education are available locally, statewide, and nationally?
- Where should the patient first be informed about the resources available?
- How does social media aid in patient education on opioid addiction?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing
-

Working with Patients and Caregivers

Task Number 135

Describe key communication topics involving opioids for patients.

Definition

Description should include

- benefits and risks of opioids
- opioid risk screening (i.e., taking a social, medical, and financial history)
- risk mitigation (e.g., naloxone, safe storage, pain contracts)
- medication tapers and/or discontinuation of therapy.

Process/Skill Questions

- What are the benefits of using opioids in medicine?
- What is the relationship between demographics and risk of opioid addiction?
- How does culture influence risk factors in opioid abuse?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Clinical Nursing

Task Number 136

Describe communication topics for caregivers and family members.

Definition

Description should include

- basic knowledge about opioids
- signs of addiction
- treatment options for addiction
- naloxone training for caregivers
- legal issues related to misuse.

Process/Skill Questions

- What rights do caregivers have in regard to medical information of the abuser?
- What legal steps might the caregiver or family have to take for treatment?
- Where can the caregiver or family members receive naloxone training? Are children of opioid abusers eligible for training?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Clinical Nursing

SOL Correlation by Task

39	Explain opportunities in the healthcare industry.	English: 10.5, 11.5, 12.5 History and Social Science: VUS.14
----	---	--

40	Identify the roles of healthcare team members.	English: 10.5, 11.5, 12.5
41	Interpret the psychosocial aspects of patient/client care.	English: 10.5, 11.5, 12.5
42	Identify signs of child, elder, and domestic abuse and neglect.	English: 10.5, 11.5, 12.5 History and Social Science: GOVT.16
43	Apply concepts of Health Insurance Portability and Accountability Act of 1996 (HIPAA) legislation.	English: 10.5, 11.5, 12.5 History and Social Science: GOVT.16, VUS.14
44	Identify scope of practice for the healthcare assistant and for other members of the healthcare team.	English: 10.5, 11.5, 12.5
45	Describe legal implications of advanced directives.	English: 10.5, 11.5, 12.5 History and Social Science: GOVT.15, GOVT.16
46	Explore concepts of biomedical ethics.	English: 10.5, 11.5, 12.5 History and Social Science: VUS.1
47	Implement the practices of the Patient's Bill of Rights and the Resident's Bill of Rights.	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8 History and Social Science: GOVT.16
48	Explain <i>communication</i> and its role in the healthcare industry.	English: 10.5, 11.5, 12.5 History and Social Science: GOVT.16
49	Apply effective communication techniques.	English: 10.5, 11.5, 12.5
50	Explain the purpose, parts, and information found in the medical record.	English: 10.5, 11.5, 12.5 History and Social Science: GOVT.16, VUS.14
51	Interpret medical terminology and abbreviations.	English: 10.5, 11.5, 12.5
52	Make unoccupied and occupied beds.	
53	Bathe patient/client as prescribed in care plan.	
54	Provide skin care.	
55	Perform oral hygiene.	
56	Provide perineal care, including catheter care.	
57	Assist patient/client with use of bedpan or urinal.	
58	Perform range-of-motion (ROM) exercises.	
59	Position patient/client.	
60	Transfer patient/client.	
61	Assist patient/client in ambulation, including use of assistive devices.	

62	Transport patient/client.	
63	Explain how to provide a safe, clean, and comfortable environment for the patient/client.	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8 History and Social Science: GOVT.16
64	Identify environmental safety hazards, prevention methods, and disaster plans.	English: 10.5, 11.5, 12.5
65	Implement standard precautions and infectious disease control measures.	English: 10.5, 11.5, 12.5
66	Assist with sterile techniques.	
67	Identify sterilization and sanitation procedures.	English: 10.5, 11.5, 12.5
68	Identify laws concerning hazardous materials.	English: 10.5, 11.5, 12.5
69	Demonstrate use of personal protective equipment (PPE).	
70	Describe facility admission, transfer, and discharge processes.	English: 10.5, 11.5, 12.5
71	Demonstrate proper body mechanics.	
72	Identify structures and functions of the integumentary system.	English: 10.5, 11.5, 12.5 Science: BIO.4d
73	Identify major disorders of the integumentary system.	English: 10.5, 11.5, 12.5
74	Identify structures and functions of the circulatory system.	English: 10.5, 11.5, 12.5 Science: BIO.4d
75	Identify major disorders of the circulatory system.	English: 10.5, 11.5, 12.5
76	Identify structures and functions of the respiratory system.	English: 10.5, 11.5, 12.5 Science: BIO.4d
77	Identify major disorders of the respiratory system.	English: 10.5, 11.5, 12.5
78	Identify structures and functions of the nervous system.	English: 10.5, 11.5, 12.5 Science: BIO.4d
79	Identify major disorders of the nervous system.	English: 10.5, 11.5, 12.5
80	Identify structures and functions of the musculoskeletal system.	English: 10.5, 11.5, 12.5 Science: BIO.4d
81	Identify major disorders of the musculoskeletal system.	English: 10.5, 11.5, 12.5
82	Identify structures and functions of the reproductive system.	English: 10.5, 11.5, 12.5 Science: BIO.4d
83	Identify major disorders of the reproductive system.	English: 10.5, 11.5, 12.5
84	Identify structures and functions of the urinary system.	English: 10.5, 11.5, 12.5 Science: BIO.4d

85	Identify major disorders of the urinary system.	English: 10.5, 11.5, 12.5
86	Identify structures and functions of the gastrointestinal system.	English: 10.5, 11.5, 12.5 Science: BIO.4d
87	Identify major disorders of the gastrointestinal system.	English: 10.5, 11.5, 12.5
88	Identify structures and functions of the endocrine system.	English: 10.5, 11.5, 12.5 Science: BIO.4d
89	Identify major disorders of the endocrine system.	English: 10.5, 11.5, 12.5
90	Report patient/client information and observations.	English: 10.5, 10.6, 11.5, 11.6, 12.5, 12.6
91	Measure routine vital signs (blood pressure; apical pulse; radial pulse; oral, aural, temporal artery; rectal, and axillary temperature).	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8
92	Measure and record intake and output.	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8 Mathematics: A.4
93	Explain anti-embolic stockings.	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8
94	Explain height and weight measurement for all age groups.	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8 Mathematics: A.4
95	Assist with the application and removal of braces, supports, and prosthetic devices.	
96	Assist with ostomy care.	
97	Explain routine specimen collection.	English: 10.5, 11.5, 12.5
98	Describe methods of assisting a patient/client with bladder and bowel training.	English: 10.5, 11.5, 12.5
99	Explain how to assist the incontinent patient/client.	English: 10.3, 10.5, 11.3, 11.5, 12.3, 12.5
100	Explain how to assist the patient/client receiving oxygen therapy.	
101	Explain how to assist with postmortem care.	
102	Identify the food groups according to United States Department of Agriculture (USDA) guidelines.	English: 10.5
103	Identify common therapeutic diets.	English: 10.5
104	Explain how to care for the patient/client with a feeding tube.	
105	Explain how to assist patient/client with eating and hydration.	
106	Measure fluid and food intake and output (as required by the Virginia Board of Nursing regulation).	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8

		Mathematics: A.4 Science: BIO.1
107	Feed a client/resident/patient (as required by the Virginia Board of Nursing regulation).	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8
108	Identify general first aid concepts.	English: 10.5, 11.5, 12.5
109	Control external bleeding.	
110	Administer cardiopulmonary resuscitation (CPR) and use of Automated External Defibrillator (AED).	English: 10.5, 11.5, 12.5
111	Describe major stages of growth and development, including normal personality development.	English: 10.5, 11.5, 12.5
112	Describe positive coping behavior in response to stress.	English: 10.5, 11.5, 12.5
113	Identify communication concepts across the lifespan.	English: 10.5, 11.5, 12.5
114	Identify physical and psychological signs and symptoms of approaching death.	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8
115	Evaluate health career options.	English: 10.5, 11.5, 12.5
116	Prepare for job opportunities in the healthcare field.	English: 10.5, 10.6, 11.5, 11.6, 12.5, 12.6
117	Explain job resignation procedures.	English: 10.1, 10.5, 10.6, 10.7, 11.1, 11.5, 11.6, 11.7, 12.1, 12.5, 12.6, 12.7
118	Describe the history and current state of the opioid crisis in the United States.	English: 10.5, 11.5, 12.5
119	Describe the history and current state of the opioid crisis in Virginia.	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8
120	Define the pharmacological components and common uses of opioids.	English: 10.3, 10.8, 11.3, 11.8, 12.3, 12.8
121	Examine the science of addiction.	English: 10.5, 11.5, 12.5
122	Explain prevention and early intervention strategies.	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8
123	Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).	English: 10.5, 11.5, 12.5
124	Describe the treatment models of addiction therapy.	English: 10.5, 11.5, 12.5
125	Describe the medication management antidote used to prevent fatal opioid overdoses.	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8
126	Explain the science of physiological and mental pain.	English: 10.3, 10.5, 11.3, 11.5, 12.3, 12.5
127	Describe the diagnostic tools used in developing pain management plans.	English: 10.5, 11.5, 12.5
128	Describe pain treatment options available to various populations of patients.	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8
129	Describe the effects of opioid dependency on the human body systems.	English: 10.5, 11.5, 12.5 History and Social Science: WHII.4

130	Explain the mechanism and physical effects of opioids on the human body.	English: 10.5, 11.5, 12.5
131	Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.	English: 10.5, 11.5, 12.5
132	Describe the withdrawal and tapering side effects of opioid use.	English: 10.5, 11.5, 12.5
133	Describe storage and disposal options for opioids.	English: 10.5, 10.8, 11.5, 11.8, 12.5, 12.8
134	Explain community resources for education about opioid use.	English: 10.5, 11.5, 12.5
135	Describe key communication topics involving opioids for patients.	English: 10.5, 11.5, 12.5
136	Describe communication topics for caregivers and family members.	English: 10.5, 11.5, 12.5

Entrepreneurship Infusion Units

Entrepreneurship Infusion Units may be used to help students achieve additional, focused competencies and enhance the validated tasks/competencies related to identifying and starting a new business venture. Because the unit is a complement to certain designated courses and is not mandatory, all tasks/competencies are marked “optional.”

Opioid Abuse Prevention Education

This [Opioid Abuse Prevention](#) document includes resources for opioid abuse prevention education from kindergarten to 12th grade.

Other Opioid Resources

Virginia Department of Behavioral Health and Developmental Services. Revive! Opioid Overdose and Naloxone Education for Virginia. [Naloxone Fact Sheet](#) (PDF).

Virginia Department of Behavioral Health and Developmental Services. [Revive! Opioid Overdose and Naloxone Education for Virginia](#) (Website).

Office of National Drug Control Policy, White House. [Fentanyl: Safety Recommendations for First Responders](#) (PDF).

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Alcohol](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Bath Salts](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Cocaine](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: E-Cigarette](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Heroin](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Marijuana](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: MDMA](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Meth](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Pain Medicine](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Spice \(K2\)](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Tobacco and Nicotine](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Other Drugs People Use and Misuse](#) (Website; PDF available)

Appendix: Credentials, Course Sequences, and Career Cluster Information

Industry Credentials: Only apply to 36-week courses

- College and Work Readiness Assessment (CWRA+)
- Health Assisting Assessment
- National Career Readiness Certificate Assessment
- Workplace Readiness Skills for the Commonwealth Examination

Concentration sequences: *A combination of this course and those below, equivalent to two 36-week courses, is a concentration sequence. Students wishing to complete a specialization may take additional courses based on their career pathways. A program completer is a student who has met the requirements for a CTE concentration sequence and all other requirements for high school graduation or an approved alternative education program.*

- Biomedical Technician (8347/36 weeks)
- Dental Careers I (8328/36 weeks, 280 hours)
- Home Health Aide (8364/36 weeks)
- Introduction to Health and Medical Sciences (8302/36 weeks)
- Introduction to Health and Medical Sciences (8301/18 weeks)
- Medical Assistant I (8345/36 weeks, 280 hours)
- Mental Health Assisting Careers (8332/36 weeks, 280 hours)
- Nurse Aide I (8360/36 weeks, 280 hours)
- Nurse Aide I Condensed (8355/36 weeks, 140 hours)
- Pharmacy Technician I (8305/36 weeks, 140 hours)
- Physical/Occupational Therapy I (8365/36 weeks, 280 hours)
- Physical/Occupational Therapy II (8366/36 weeks, 280 hours)
- Sports Medicine I (7660/36 weeks, 280 hours)
- Sports Medicine I Condensed (8316/36 weeks, 140 hours)

Career Cluster: Health Science	
Pathway	Occupations
Support Services	Front Office Assistant Medical Transcriptionist Medical, Clinical Laboratory Technologist
Therapeutic Services	Certified Nurse Aide Emergency Medical Technician, Paramedic Home Health Aide Massage Therapist Medical Assistant Physical Therapist Assistant Veterinary Assistant