Catalog Description: NURA 1301/NURA 1001 (CE)

Lecture hours = 1, Lab Hrs = 0, Ext Hrs = 2

Prerequisites: none

Semester Credit Hours: 3
Lecture Hours per Week: 1
Lab Hours per Week: 0
Ext. Hours: 6
Contact Hours per Semester: 112

State Approval Code: 51.3902

Instructional Goals and Purposes: The purpose of this course is to provide nurse aides with the knowledge, skills and abilities essential for the provision of basic care to residents in long-term care facilities.

Learning Outcomes: After completing this course, participants will be able to:

1. Provide basic care to residents of long-term care facilities
2. Communicate and interact effectively with residents and their families, with sensitivity to the psychosocial needs of residents.
3. Assist residents in attaining and maintaining maximum functional independence.
4. Protect, support and promote the rights of residents.
5. Provide safety and preventive measures in the care of residents.
6. Demonstrate skill in observing, reporting and documentation.
7. Function effectively as a member of the health care team.

Specific Course Objectives (includes SCANS):
After studying all materials and resources presented in the course, the student will be able to:

Section 1: Introduction to Long Term Care (LTC)
( scans reference: 1a-i,iv,v,1b-i,ii,iv,vi,1c-i-v, 2a-i, 2b-i, iv, 2c-i-iii,)

Unit 1: Introduction
- State the intent of OBRA
- Describe the OBRA requirements for nurse aide training and placement on the Texas Registry.
- Discuss who can work as a nurse aide in a nursing facility.
- Discuss the benefits of this course to residents, nurse aides and LTC facilities.
- State the purpose of the LTC facility.
- Describe the types of residents in LTC facilities.
- Discuss common needs we all share.
- Explain the resident’s right to privacy of person and condition.
• Describe a common belief or feeling about aging and discuss whether it is true.

Unit 2: Role of the Nurse Aide in LTC
• Discuss the history of the nurse aide.
• Discuss the possible career ladder.
• Discuss the importance of their role in taking care of the residents.
• State the qualities of an effective nurse aide
• List the responsibilities of the nurse aide to the residents, the facility and other staff.
• Discuss the role of the nurse aide in relation to the health care team. What should the nurse aide do if asked to perform a task which is beyond scope?
• Discuss examples of how a nurse aide’s relationship with a resident would be appropriate or inappropriate.
• Discuss whether or not it is appropriate for a nurse aide to accept a gift from a resident / client.

Unit 3: Safety Measures
• Discuss the importance of safety in the long-term care facility.
• Describe physical changes that are beyond the resident’s control.
• Recognize safety hazards and describe how to maintain environmental safety in the long-term care facility.
• Describe how to lock out unsafe or broken equipment.
• Describe the procedure to follow for reporting incidents and accidents.
• Describe the importance of Material Safety Data Sheets (MSDS) and where they are located and how they are used in your facility.
• Demonstrate proper use and response to a resident’s call signal following facility policy.
• Describe different types of oxygen delivery.
• State safety precautions to take when oxygen is in use.
• Identify measure to prevent fires according to facility policy.
• Locate the emergency fire and disaster plans, emergency exits, alarm system and fire extinguishers.
• Describe the role of the nurse aide in one natural disaster to the area according to facility policy.
• Describe the requirements of:
  ✓ The Safe Medical Device Act of 1991
  ✓ The Texas Concealed Handgun Law
  ✓ OSHA

Unit 4: Emergency Measures
• Describe and /or demonstrate laboratory skill in emergency measures for:
  ✓ Fainting/syncope
  ✓ Falls and suspected fractures
  ✓ Seizures
  ✓ Vomiting and aspiration
  ✓ Clearing the obstructed airway

Unit 5: Infection Control
• Define:
  ✓ Microorganisms
  ✓ Pathogens
  ✓ Infections
  ✓ Medical asepsis
  ✓ Infection
• Describe why residents in a long term care facility are more at risk for infection.
• Name 3 places where microorganisms are found.
• Name 3 things that are required for microorganisms to survive.
• Name 2 internal defenses in our bodies to control illness from microorganisms.
• Identify how diseases are transmitted.
• List the 6 components of the chain of infection.
• Define medical asepsis.
• Identify practices the nurse aide can use to promote medical asepsis in the work setting.
• Discuss the methods used to kill or control microorganisms.
• Discuss aseptic measures to control the spread of infection.
• Identify the single most important practice to prevent the transmission of infection.
• Demonstrate understanding of the principles of Standard Precautions.
• Discuss examples of cross-contamination, “clean” and “dirty”.
• State the time that hands should be lathered during hand washing.
• Demonstrate the proper procedure for hand washing.
• Identify the correct personal protective equipment for specific resident care activities.
• Demonstrate proper application and removal of gloves, gown and mask.
• Describe the proper procedure for handling bio hazardous waste in your facility.
• Demonstrate understanding of the principles of Transmission Based Precautions.
• State the 3 types of Transmission Based Precautions recommended by the CDC.
• Describe what TB is and how it is spread.
• Identify 2 drug-resistant organisms and how they are spread.
• Describe how to identify head lice and how they are spread.
• Describe the infection control measure for lice.
• Describe what scabies is and how it is transmitted.
• Name 2 blood-borne pathogens.
• Describe the precautions to follow to prevent exposure to blood-borne pathogens.

Unit 6: Resident Rights and Independence
• Discuss the effects of aging and institutionalization on resident rights and independence.
• Describe the rights of residents in nursing facilities.
• Describe an example of a behavior in each area that:
  ✓ Promotes resident rights.
  ✓ Violates resident rights.
  ✓ Demonstrate respect for the rights of residents in your facility.
• Define and describe one example of each term:
  ✓ Abuse
  ✓ Neglect
  ✓ Misappropriation
• List 3 signs that might indicate that a resident has been abused.
• Describe the responsibility of the nurse aide for reporting suspected abuse, neglect or misappropriation of resident property.
• Locate the DADS Hotline number posted in the LTC facility.

Unit 7: Communication and Interpersonal Skills:
• Define verbal and nonverbal communication.
• State two ways to send and receive messages.
• Discuss the inappropriate use of technology, acronyms and slang.
• Discuss how it is inappropriate to share resident's personal information with friends and family.
• Describe how to answer the telephone in a long-term care facility.
• Give examples of age-related changes that may affect communication.
• Discuss or role play a situation in which the verbal and nonverbal message is different. Describe how this made you feel.
• Demonstrate skill in communicating with residents:
  ✓ Starting a conversation.
  ✓ Talking and listening.

Unit 8: Taking Care of Yourself:
• Describe how to prevent physical illness.
• Describe three ways to prevent work-related injuries.
• Describe ways to protect yourself legally.
• Describe ways to stay emotionally healthy.
• Describe methods for reducing stress.
• Provide examples and discuss actions of personal well-being.
• Describe personal and vocational adjustments that the nurse aide must make.
• Discuss how nurse aide can be the beginning step to a career in the healthcare field.

Section 2: Personal Care Skills
( scans reference: 1a-i,iv,v,1b-i,ii,iv,vi,1c-i-v, 2a-i, 2b-i, iv, 2c-i-iii,)

Unit 1: Body Mechanics, Positioning and Moving Residents
• State the benefits of using proper body mechanics and alignments:
  ✓ To the nurse aide
  ✓ To the resident
• Demonstrate proper body mechanics in moving and lifting.
• Demonstrate skill in positioning and supporting residents in proper body alignment in bed, chair and wheelchair.
• Demonstrate ability to elevate head of bed to a 45 degree angle.
• Demonstrate skill in:
  ✓ Turning resident on side toward you.
  ✓ Moving resident in bed
  ✓ Assisting resident to sit up on side of bed.
  ✓ Assisting resident to transfer to chair or wheelchair.
• Demonstrate skill in assisting resident with ambulation using:
  ✓ Gait belt
  ✓ Cane
  ✓ Walker

Unit 2: Care of the Resident’s Environment
• Discuss why the resident’s personal belonging may be so important to the resident.
• Discuss and demonstrate skill in maintaining a safe and comfortable environment for the resident while respecting the resident’s personal preference.
• Discuss alternative use of siderails according to facility policy.
• Demonstrate skill in the proper use and care of equipment and supplies in the resident’s room.
• Demonstrate skill in correct handling of clean and dirty linen.
• Demonstrate skill in making the occupied and unoccupied bed.

Unit 3: Assisting residents with bathing
• Discuss how difficult it would be to depend on someone else to perform your personal hygiene and what would make it less difficult.
• Describe the important role of the nurse aide in assisting residents with personal care on a daily basis.
• Discuss how the nurse aide can use bath time to identify and meet the residents’ needs.
• Discuss how the nurse aide can protect residents’ rights while assisting with personal care.
• Demonstrate skill in safely assisting resident into and out of tub or shower.
• Demonstrate skill in assisting residents with:
✓ Tub bath
✓ Shower bath
✓ Complete bed bath

Unit 4: Toileting and Perineal Care
• Discuss ways to promote privacy while assisting a resident with toileting.
• Demonstrate skill in assisting residents with:
  ✓ Bathroom or bedside commode
  ✓ Bedpan and urinal.
• Describe the importance of perineal care/incontinent care.
• Demonstrate skill in giving perineal care/incontinent care:
  ✓ Female
  ✓ Male

Unit 5: Skin Care
• State changes in the skin, hair and nails associated with aging.
• Identify common sites of skin breakdown.
• Describe and/or demonstrate skill in observing, recognizing and reporting early signs of pressure areas and skin breakdown.
• Describe and/or demonstrate skill in giving skin care for the prevention of pressure ulcers.
• Define “friction” and “shearing” and describe measures for prevention.
• State normal daily fluid requirements.
• Describe the skin changes you would report to the nurse.
• Describe the care of the resident with skin redness or breakdown.
• Describe how good nutrition affects the skin.

Unit 6: Hygiene and Grooming
• Demonstrate skill in assisting with oral care:
  ✓ Brushing the teeth
  ✓ Denture care
  ✓ Special mouth care
• Instruct students to encourage self-flossing for residents who are self-care.
• Identify one precaution that should be followed when assisting with oral care.
• Demonstrate skill in assisting residents with:
  ✓ Hair care
  ✓ Shampooing the hair
  ✓ Shaving the resident
  ✓ Hand, foot and nail care
  ✓ Dressing and undressing the resident
  ✓ Knee high stocking
• Identify one precaution that should be followed when cutting resident’s toenails.
• Discuss ways to promote residents’ independence and participation in personal grooming.
• Describe the tasks required in performing A.M. and P.M. care.

Unit 7: Nutrition
• Define the six groups of foods in the food plate.
• List two changes associated with aging that affect eating and drinking.
• Discuss the importance of eating to residents.
• Demonstrate skill in assisting residents with meals.
• Demonstrate skill in feeding the dependent resident.

Unit 8: Hydration
• State the range of normal fluid intake and output.
• Describe one observation you could make to recognize:
  ✓ Insufficient fluid intake
  ✓ Fluid retention
• Describe and demonstrate measures to increase fluid intake.
- Demonstrate skill in serving fresh water to residents using proper infection control practices.
- Describe and demonstrate skill in measuring and recording I & O, using the fluid containers.
- Describe the nurse aide's responsibilities when fluids are restricted.
- Describe situations where fluid restrictions are required.

**Unit 9: Elimination**
- Describe the changes in urinary function associated with aging.
- Demonstrate skill in the care of indwelling urinary catheters.
- State observations about urinary elimination that should be reported to the charge nurse.
- Describe the changes in bowel function associated with aging.
- Describe measures to help prevent constipation.
- Describe ways to identify fecal impaction.
- State observations about bowel elimination that should be reported to the nurse.
- Discuss ways to prevent the spreading of bacteria when resident has diarrhea.
- Discuss the important role of the nurse aide in regular and prompt toileting of residents.
- Discuss the important role of the nurse aide in the bowel and/or bladder toileting program in your facility.
- Describe and demonstrate skill in collecting:
  - Routine or clean-catch urine specimens.
  - Routine stool specimens

**Section 3: Basic Nursing Skills**
( scans reference: 1a-i,iv,v,1b-i,ii,iv,vi,1c-i-v, 2a-i, 2b-i, iv, 2c-i-iii, )

**Unit 1: Promoting a Restraint-Proper Environment**
- Define physical restraints and name 2 types of restraints.
- Name three measures to use to help avoid the need for restraints.
- Describe the observation and problem-solving measures you could use to help maintain a proper restraint free environment.
- Discuss the important role of the nurse aide in avoiding restraints.
- Describe the care that must be given to a restrained resident every 2 hours.

**Unit 2: Vital Signs, Height and Weight**
- State the normal temperature and the range to be reported for:
  - Oral Temperature
  - Axillary Temperature
  - Aural Temperature
- State the normal rate and the range to be reported for
  - Pulse
  - Respiration
- Discuss and demonstrate skill in recognizing and reporting irregular pulse and respiratory rates.
- State the normal blood pressure and the range to be reported
- Demonstrate skill in taking and recording blood pressure
- Demonstrate skill in taking and recording height and weight.

**Unit 3: Observing, Reporting and Charting**
- Explain the importance of recognizing and reporting changes in resident's condition.
- Give two examples of how accurate observations and reporting by the nurse aide can lead to better care of residents.
- Demonstrate skill in reporting and recording the care you give and / or observations you make.

**Unit 4: Admission, Transfer and Discharge**
- Describe the role of the nurse aide in admission, transfer and discharge of residents.
- Discuss ways the nurse aide can help a new resident adjust to changes in surroundings and residents' psychosocial needs.
• Discuss signs of physical and mental behavior and when to report to nurse.

**Unit 5: Coping with Death**

• List signs of approaching death, including loss of senses and body functions.
• Describe how you will manage your own feelings about death and how you can get support for yourself.
• Discuss spiritual and cultural needs of the dying resident.
• Describe and/or demonstrate the role of the nurse aide in giving physical and emotional support to the dying resident.
• Discuss how hospice care is a partner in care.
• Discuss and/or demonstrate the procedure for postmortem care.

**Section 4: Restorative Services**

( scans reference: 1a-i,iv,v,1b-i,ii,iv,vi,1c-i-v, 2a-i, 2b-i, iv, 2c-i-iii,)

**Unit 1: Psychosocial Needs of Residents**

• Define restoration
• Discuss how restoration can improve self-esteem and the quality of life.
• Identify three guidelines for restorative care.
• Discuss the importance of the nurse aide in restorative care.

**Unit 2: Role of the Nurse Aide in Restoration Care**

• Discuss ways to incorporate restorative care into daily activities.
• Describe task segmentation for a dementia patient.
• Demonstrate skill in applying general restorative measure in the care of all residents.
• State 3 types of specific restorative programs.
• Describe or demonstrate the role of the nurse aide in specific restorative programs.
• Discuss how restorative services are related to reimbursement.
• Discuss and/or demonstrate skill in assisting residents with adaptive or assistive devices for:
  ✓ Grooming
  ✓ Ambulation
  ✓ Feeding
  ✓ Communication
• Discuss and/or demonstrate skills in assisting with:
  ✓ Eye glasses
  ✓ Hearing aides
  ✓ Artificial eyes
  ✓ Artificial limbs
  ✓ Braces and splints
  ✓ Dental devices
• State the precautions and rules for PROM
• Demonstrate skill in performing PROM exercises.

**Unit V: Mental Health and Social Service Needs**

( scans reference: 1a-i,iv,v,1b-i,ii,iv,vi,1c-i-v, 2a-i, 2b-i, iv, 2c-i-iii,)

**Unit 1: Psychosocial Needs of Residents**

• State the 5 basic human needs.
• Describe an example of an appropriate and inappropriate sexual behavior of residents and how you would respond.
• Discuss Professional Boundary Guide – National Council of State Boards of Nursing (NCSBN) [https://www.ncsbn.org/ProfessionalBoundariesbrochure.pdf](https://www.ncsbn.org/ProfessionalBoundariesbrochure.pdf)
• State a specific religious activity or cultural practice and describe how the nurse aide could assist a resident to participate in the activity.
• Describe the major losses/changes associated with aging.
• Discuss how you might respond to these losses/changes.
• Describe the developmental tasks of older adults.
• Describe 2 normal psychological responses to losses/changes.
• Describe 2 normal defense mechanisms and give an example.
• Describe and/or demonstrate skill in assisting residents with psychosocial needs:

Unit 2: Culture Change
• Discuss the purpose of culture change.
• List the person-directed care values.
• List advantages of person-directed care for the resident.
• Discuss the proper way to address and speak to a resident so as not to appear patronizing.

Unit 3: Specific Behavior Problems
• Describe the unmet basic human needs that are most likely to cause behavioral problems in:
  ✓ An alert, orientated resident
  ✓ A confused resident
• Discuss how the nurse aide functions with the health care team for behavior management.
• Describe 1 step in increasing appropriate behavior and 1 step for reducing inappropriate behavior.
• Give two examples of a verbal and nonverbal reinforcer.
• Describe and/or demonstrate skill in assisting residents with specific behavior problems
  ✓ Sleep problems
  ✓ Depression
  ✓ Complaining or demanding
  ✓ Yelling or screaming
  ✓ Verbal or physical aggression

Unit 4: Cognitive Impairment
• Define cognitive impairment, dementia and Alzheimer’s Disease.
• State the major difference between acute and chronic dementia.
• Describe the effects of Alzheimer’s Disease.
• Describe the behavioral responses to cognitive impairment.
• Discuss the special needs of cognitively impaired residents (early, middle and late stages of Alzheimer’s Disease.)
• Discuss the importance of using verbal and non-verbal communication in working with cognitively impaired residents.
• Describe and/or demonstrate skill in assisting cognitively impaired residents:
  ✓ By using communication
  ✓ With memory loss/confusion
  ✓ By using reality orientation
  ✓ By using validation therapy
  ✓ With wandering
  ✓ With resistance to care
  ✓ With self-control
  ✓ With catastrophic reactions

Section 6: Social Skills
( scans reference: 1a-i,iv,v,1b-i,ii,iv,vi,1c-i-v, 2a-i, 2b-i, iv, 2c-i-iii,)

Unit 1: Conflict Resolution
• Give examples of conflict resolution.
• Discuss why conflict resolution can be positive.

Unit 2: Technologies
• Describe different technology programs used with resident care.
• Discuss benefits of using technology in the nursing home.
• Discuss inappropriate use of social media in the workplace.
• Discuss consequences of inappropriate use of social media.

**Course Content:**
Students in all sections of this course will be required to do the following:

I. Have regular and punctual class attendance.

II. Have an average of 75% grade or better on tests.

III. Preparation and active participation in class discussions.

IV. Read assigned chapter assignments in textbook.

V. Compliance with the rules and regulations as outlined in the Certified Nurse Aide Handbook.

VI. Students will demonstrate proficiently, accurately and safely the following learned skills according to the Texas Nurse Aide Performance Record.

   1. Hand hygiene
   2. Apply knee – high elastic stocking
   3. Assist to ambulate using a transfer belt
   4. Assist with the use of a bedpan
   5. Clean upper and lower dentures
   6. Counts and record radial pulse
   7. Count and record respirations
   8. Donning and removing PPE ( gown and gloves)
   9. Dress client/resident with affected (weak) arm
   10. Feed client/resident who cannot feed self
   11. Give a bed bath.
   12. Measure and record blood pressure
   13. Measure and record urinary output
   14. Measure and record weight of ambulatory client
   15. Perform passive range of motion for knee and ankle
   16. Perform passive range of motion for shoulder
   17. Position client/resident on side
   18. Provide catheter care for female
   19. Provide foot care to client/resident
   20. Provide mouth care
   21. Provide peri-care to female client/resident
   22. Transfer client/resident from bed to wheelchair using transfer belt

**Methods of Instruction/Course Format/Delivery:**

Classroom: Face to face lecture, class discussion / participation, role play, videos, power point presentation.

Skills Lab: Demonstration, return demonstration, participation, role play, discussion, videos.

Clinical: Competent and appropriate participation and demonstration of skills learned in a hands on environment in the long term care setting.
Assessment:
The following items will be assigned during the semester and used to calculate the student’s final grade:

- *Chapter tests.*
- *Classroom participation / skills lab demonstration*
- *Clinical participation and skills performance at approved long term care facility.*

Course Grade:
The grading scale for this course is as follows:

- Attendance/ Punctuality to class/clinical – 10%
- Tests – 80%
- Skill proficiency on Texas Nurse Aide Performance Record – 10%

*Test average must be equal to or greater than 75 to pass the course.*

**Grading:**

- A = 90 -100
- B = 80-89
- C = 75-75.99
- F = 74.99 and below

*Make up exams may be given at the discretion of the instructor.*

Texts, Materials, and Supplies:

- *Texas Curriculum for Nurse Aides in Long-Term Care Facilities (Fourth Edition) 2013,* Texas Department of Aging and Disability Services Regulatory Services, Nurse Aide Training Program.

Other:

- For current texts and materials, use the following link to access bookstore listings: [http://www.panolacollegestore.com](http://www.panolacollegestore.com)
- For testing services, use the following link: [http://www.panola.edu/elearning/testing.html](http://www.panola.edu/elearning/testing.html)
- If any student in this class has special classroom or testing needs because of a physical learning or emotional condition, please contact the ADA Student Coordinator in Support Services located in the Administration Building or go to [http://www.panola.edu/student-success/disability-support-services/](http://www.panola.edu/student-success/disability-support-services/) for more information.
- Withdrawing from a course is the student’s responsibility. Students who do not attend class and who do not withdraw will receive the grade earned for the course.
SCANS CRITERIA

1) Foundation skills are defined in three areas: basic skills, thinking skills, and personal qualities.

   a) Basic Skills: A worker must read, write, perform arithmetic and mathematical operations, listen, and speak effectively. These skills include:
      i) Reading: locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.
      ii) Writing: communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.
      iii) Arithmetic and Mathematical Operations: perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.
      iv) Listening: receive, attend to, interpret, and respond to verbal messages and other cues.
      v) Speaking: Organize ideas and communicate orally.

   b) Thinking Skills: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively. These skills include:
      i) Creative Thinking: generate new ideas.
      ii) Decision Making: specify goals and constraints, generate alternatives, consider risks, and evaluate and choose the best alternative.
      iii) Problem Solving: recognize problems and devise and implement plan of action.
      iv) Visualize ("Seeing Things in the Mind's Eye"): organize and process symbols, pictures, graphs, objects, and other information.
      v) Knowing How to Learn: use efficient learning techniques to acquire and apply new knowledge and skills.
      vi) Reasoning: discover a rule or principle underlying the relationship between two or more objects and apply it when solving a problem.

   c) Personal Qualities: A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.
      i) Responsibility: exert a high level of effort and persevere toward goal attainment.
      ii) Self-Esteem: believe in one's own self-worth and maintain a positive view of oneself.
      iii) Sociability: demonstrate understanding, friendliness, adaptability, empathy, and politeness in group settings.
      iv) Self-Management: assess oneself accurately, set personal goals, monitor progress, and exhibit self-control.
      v) Integrity and Honesty: choose ethical courses of action.

2) Workplace competencies are defined in five areas: resources, interpersonal skills, information, systems, and technology.

   a) Resources: A worker must identify, organize, plan, and allocate resources effectively.
      i) Time: select goal-relevant activities, rank them, allocate time, and prepare and follow schedules.
      ii) Money: Use or prepare budgets, make forecasts, keep records, and make adjustments to meet objectives.
      iii) Material and Facilities: Acquire, store, allocate, and use materials or space efficiently. Examples: construct a decision time line chart; use computer software to plan a project; prepare a budget; conduct a cost/benefits analysis; design an RFP process; write a job description; develop a staffing plan.

   b) Interpersonal Skills: A worker must work with others effectively.
      i) Participate as a Member of a Team: contribute to group effort.
      ii) Teach Others New Skills.
      iii) Serve Clients/Customers: work to satisfy customer's expectations.
iv) Exercise Leadership: communicate ideas to justify position, persuade and convince others, responsibly challenge existing procedures and policies.

v) Negotiate: work toward agreements involving exchange of resources, resolve divergent interests.

vi) Work with Diversity: work well with men and women from diverse backgrounds. Examples: collaborate with a group member to solve a problem; work through a group conflict situation, train a colleague; deal with a dissatisfied customer in person; select and use appropriate leadership styles; use effective delegation techniques; conduct an individual or team negotiation; demonstrate an understanding of how people from different cultural backgrounds might behave in various situations.

c) Information: A worker must be able to acquire and use information.
   i) Acquire and Evaluate Information.
   ii) Organize and Maintain Information.
   iii) Interpret and Communicate Information.
   iv) Use Computers to Process Information.
   Examples: research and collect data from various sources; develop a form to collect data; develop an inventory record-keeping system; produce a report using graphics; make an oral presentation using various media; use on-line computer data bases to research a report; use a computer spreadsheet to develop a budget.

d) Systems: A worker must understand complex interrelationships.
   i) Understand Systems: know how social, organizational, and technological systems work and operate effectively with them.
   ii) Monitor and Correct Performance: distinguish trends, predict impacts on system operations, diagnose deviations in systems' performance and correct malfunctions.
   iii) Improve or Design Systems: suggest modifications to existing systems and develop new or alternative systems to improve performance.
   Examples: draw and interpret an organizational chart; develop a monitoring process; choose a situation needing improvement, break it down, examine it, propose an improvement, and implement it.

e) Technology: A worker must be able to work with a variety of technologies.
   i) Select Technology: choose procedures, tools or equipment including computers and related technologies.
   ii) Apply Technologies to Task: understand overall intent and proper procedures for setup and operation of equipment.
   iii) Maintain and Troubleshoot Equipment: Prevent, identify, or solve problems with equipment, including computers and other technologies.
   Examples: read equipment descriptions and technical specifications to select equipment to meet needs; set up and assemble appropriate equipment from instructions; read and follow directions for troubleshooting and repairing equipment.