



MDCA 1417 - Procedures in a Clinical Setting Course Syllabus

Description

Emphasis on patient assessment, examination, and treatment as directed by physician. Includes vital signs, collection and documentation of patient information, asepsis, office clinical procedures, and other treatments as appropriate for ambulatory care settings.

Semester Offered

Fall and Spring semesters

Credits 4

Lecture Hours 3

Lab Hours 2

Extended Hours 0

Contact Hours 80

State Approval Code CIP 51.0801

Instructor Name Kay Hawthorne MSN, RN

Semester/Year Fall 2025

Meeting Time and Location

Mondays, Skills Lab 2:00 pm to 4:30 pm

Alternate Operations During Campus Closure

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Panola College to move to altered operations. During this time, Panola College may opt to continue delivery of instruction through methods that include, but are not limited to: online learning management system (CANVAS), online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor Panola College's website (www.panola.edu) for instructions about continuing courses remotely, CANVAS for each class for course-specific communication, and Panola College email for important general information.

Student Basic Needs

Unexpected circumstances may arise, but Panola College offers various resources to support students. If you need mental health services or are facing challenges with transportation, affording class materials and supplies, or accessing food regularly—issues that may impact your class performance—please visit panola.edu/resources.

Class Attendance

Regular and punctual attendance of classes and laboratories is required of all students. When a student has been ill or absent from class for approved extracurricular activities, he or she should be allowed, as far as possible, to make up for the missed work. If a student has not actively participated by the census date, they will be dropped by the instructor for non-attendance. This policy applies to courses that are in-person, online, hybrid, and hyflex.

Attendance in online courses is determined by submission of an assignment or participation in an activity. According to federal guidelines, simply logging into a distance learning course without participating in an

academic assignment does not constitute attendance. Distance learning is defined as when a majority (more than 50%) of instruction occurs when the instructor and students are in separate physical locations. Students must engage in an academic activity prior to the course census date.

When an instructor feels that a student has been absent to such a degree as to invalidate the learning experience, the instructor may recommend to the Vice President of Instruction that the student be withdrawn from the course. Instructors may seek to withdraw students for non-attendance after they have accumulated the following number of absences:

Fall or spring semesters:

3 or more class meeting times per week - 5 absences

2 class meeting times per week - 3 absences

1 class meeting per week - 2 absences

The student is responsible for seeing that he or she has been officially withdrawn from a class. A student who stops attendance in a class without officially withdrawing from that class will be given a failing grade; consequently, the student must follow official withdrawal procedures in the Admissions/Records Office.

Please note: Health Science and Cosmetology courses may require more stringent attendance policies based on their accreditation agencies. Please see the addendum and/or program handbook for further information concerning attendance.

Pregnant/Parenting Policy

Panola College welcomes pregnant and parenting students as a part of the student body. This institution is committed to providing support and adaptations for a successful educational experience for pregnant and parenting students. Students experiencing a need for accommodations related to pregnancy or parenting will find a Pregnancy and Parenting Accommodations Request form in the Student Handbook or may request the form from the course instructor.

Artificial Intelligence (AI) Course Policy

Use of generated AI Permitted under some classroom circumstances with permission.

There are situations throughout the course where you may be asked to use artificial intelligence (AI) tools to explore how they can be used. Outside of those circumstances, you should not use AI tools to generate content that will end up in any student work (assignments, activities, discussion responses, etc.). In such cases for Option #2, no more than 25% of the student work should be generated by AI. Use of any AI-generated content in this course without the instructor's consent qualifies as academic dishonesty and violates Panola College's standards of academic integrity.

Instructional Goals and Purposes

The purpose of this course is to enable students to assist with routine and specialty office examinations and procedures including inventory control; perform medical and surgical asepsis and sterile techniques appropriate in ambulatory care settings; apply governmental health care guidelines; and respond to medical emergencies. Additional goals of this course is to provide students with knowledge of clinical duties related to medical specialties.

Learning Outcomes

After studying all materials and resources presented in the course, the student will be able to:

1. Discuss the important aspects of nutrition and wellness
2. Demonstrate Medical asepsis and infection control
3. Perform a patient assessment and interview including a medical history
4. Demonstrate anthropometric and vital sign measurements
5. Assist with a physical examination
6. Demonstrate care and handling of surgical instruments and supplies
7. Demonstrate assisting with minor office surgery
8. Describe the process of radiology procedures
9. Detail what to do in a medical office emergency
10. Apply governmental health care guidelines.

11. Identify common pathology related to each body system as related to common skin disorders.
12. Apply dressing and bandages to wounds.
13. Identify common pathology related to each body system including signs, symptoms, and etiology
 - A. Describe common disorders of the musculoskeletal system
 - B. Compare the different types of fractures
 - C. Identify and explain diagnostic procedures of the musculoskeletal system
14. Discuss the role of the medical assistant in caring for the patient with a musculoskeletal system disorder
15. Apply an arm sling.
16. Identify common pathology related to each body system including signs, symptoms, and etiology
 - A. Describe common eye, ear, nose, and throat disorders
 - B. Identify and explain diagnostic eye, ear, nose, and throat procedures
17. Identify common pathology related to each body system including signs, symptoms, and etiology
 - A. Identify the primary defense mechanisms of the respiratory system
 - B. Identify and explain diagnostic procedures of the respiratory system
 - C. Describe the physician's examination of the respiratory system
18. Identify common pathology related to each body system including signs, symptoms, and etiology
 - A. List and describe common cardiovascular procedures and tests
 - B. Obtain a 12-lead EKG
19. Identify common pathology related to each body system including signs, symptoms, and etiology
 - A. List and describe common disorders of the alimentary canal and accessory organs
 - B. Identify and explain the purpose of common procedures and tests associated with the gastrointestinal system
20. Identify common pathology related to each body system including signs, symptoms, and etiology
 - A. List and describe common diseases of the nervous system
 - B. Describe the physical and emotional effects of degenerative nervous system disorders
 - C. List potential complications of a spinal cord injury
 - D. Name and describe the common procedures for diagnosing nervous system disorders
21. Identify common pathology related to each body system including signs, symptoms, and etiology
 - A. List and describe common diseases of the urinary system and the male reproductive system
 - B. Describe and explain the purpose of various diagnostic procedures associated with the urinary system
 - C. Name and describe the common procedures for diagnosing urinary system disorders.
22. List and describe common gynecologic and obstetric disorders
23. Identify your role in the care of gynecologic and obstetric patients
24. Describe the components of prenatal and postpartum patient care
25. Identify abnormal conditions of the thyroid, pancreas, adrenal, and pituitary glands
26. List types and schedule of immunizations
27. Explain the difference between a well-child and a sick-child visit
28. Explain how aging affects thought process
29. Discuss communication problems that may occur with the older adult and list steps to maintain open communication
30. List and describe physical changes and diseases common to the aging process

Specific Course Objectives (includes SCANS)

After studying all materials and resources presented in the course, the student will be able to:

Chapters	References/ Assignments
<p>Chapter 33 – Nutrition in Health and Disease</p> <p>Using critical thinking skills and demonstrating respect for diversity in approaching patients and families, at the end of the unit, the student will be able to:</p> <ol style="list-style-type: none"> 1. Comprehend and explain to the patient the importance of diet and nutrition (1 aiv, 1 bii) 2. Effectively convey and educate patients regarding the proper diet and nutrition guidelines (2 bi, 2 bii,) 3. Identify categories of patients who require special diets or diet modifications (2 biii) 4. Document accurately (1 aii, 2 ci) 	<p>Chapter 33</p>

<p>Chapter 21 – Medical Asepsis and Infection Control</p> <p>Using critical thinking skills and demonstrating respect for diversity in approaching patients and families, at the end of the unit, the student will be able to:</p> <ol style="list-style-type: none"> 1. Apply Principles of aseptic techniques and infection control (1 ci, 2 bi) 2. Use standard precautions (1 ci, 2bi) 3. Dispose of biohazardous materials (1 civ, 1ci) 	Chapter 21
<p>Chapter 22 – The Patient History and Documentation</p> <p>Using critical thinking skills and demonstrating respect for diversity in approaching patients and families, at the end of the unit, the student will be able to:</p> <ol style="list-style-type: none"> 1. Be impartial and show empathy when dealing with patients (2 biii, 1 av) 2. Interview effectively (1 aiv, 1 bi) 3. Recognize and respond to verbal and nonverbal communication (2 bvi) 4. Obtain chief complaint, recording patient history (2 bi, 2 biii) 	Chapter 22
<p>Chapter 23 – Vital Signs and Measurements</p> <p>Using critical thinking skills and demonstrating respect for diversity in approaching patients and families, at the end of the unit, the student will be able to:</p> <ol style="list-style-type: none"> 1. Take vital signs (1 bv, 2 biii) 2. Document accurately (1 aii, 2 ci) 	Chapter 23
<p>Chapter 24 – Physical Examination</p> <p>Using critical thinking skills and demonstrating respect for diversity in approaching patients and families, at the end of the unit, the student will be able to:</p> <ol style="list-style-type: none"> 1. Prepare and maintain examination and treatment area (2bi, 2 ai) 2. Prepare patient for examinations and treatments (2 ai, 2 biii) 3. Assist physician with routine and specialty examinations and treatments (2 bi, 2 ai) 	Chapter 24
<p>Chapter 30 – Sterilization and Surgical Instruments</p> <p>Using critical thinking skills and universal precautions, at the end of the unit, the student will be able to:</p> <ol style="list-style-type: none"> 1. Explain how to wrap items for autoclaving (2 bi, 2 aiii) 2. Practice quality control (1ci, 2 aii) 3. Use standard precautions (1 ci, 1 civ) 4. Perform sterilization techniques (2 biii) 	Chapter 30
<p>Chapter 30 – Assisting with Minor Office Surgery</p> <p>Using critical thinking skills, universal precautions, and demonstrating respect for diversity in approaching patients and families, at the end of the unit, the student will be able to:</p> <ol style="list-style-type: none"> 1. Prepare patients for examinations and treatments (2 bi, 2 biii) 2. Assist physician with minor office procedures (2 ai, 2 bi) 3. Dispose of biohazardous materials (1 ci, 1 civ) 4. Document accurately (1 aii, 2 ci) 	Chapter 30
<p>Chapter 31 – Diagnostic Imaging</p> <p>Using critical thinking skills and demonstrating respect for diversity in approaching patients and families, at the end of the unit, the student will be able to:</p> <ol style="list-style-type: none"> 1. Assist the physician with the regimen of diagnostic and treatment modalities as they relate to each body system (2 bi, 2 biii) 2. Comply with federal, state, and local health laws and regulations (1 ai, 1 a ii, 1 bii) 3. Communicate on the recipient's level of comprehension (1 av, 1 aiv) 4. Serve as a liaison between the physician and others (2 bi, 2 biii) 5. Show empathy and impartiality when dealing with patients (2 bvi) 	Chapter 31
<p>Chapter 8 – Emergency Procedures and first Aid</p> <p>Using critical thinking skills, universal precautions, and demonstrating respect for diversity in approaching patients and families, at the end of the unit, the student will be able to:</p>	Chapter 8

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| <ol style="list-style-type: none"> 1. Document accurately (1 aii, 2 ci) 2. Recognize emergencies and treatments and minor office surgical procedures (1 bi, 1 biii, 2 biii) 3. Use standard precautions (1 ci, 1 civ) 4. Perform first aid and know CPR procedures/guidelines (1 bi, 1 biii, 2 biii) 5. Demonstrate professionalism by exhibiting a positive attitude and sense of responsibility (1 ci, 1 civ) | |
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After studying all materials and resources presented in the course, the student will be able to:

1. Discuss the important aspects of Dermatology (1. a-iv,v; b-ii, iii, c-l, ii)
2. Discuss the important aspects of Orthopedics (1. a-iv,v; b-ii, iii, c-l, ii)
3. Discuss the important aspects of Ophthalmology and otolaryngology (1. a-iv,v; b-ii, iii, c-l, ii)
4. Discuss the important aspects of Pulmonary Medicine (1. a-iv,v; b-ii, iii, c-l, ii)
5. Discuss the important aspects of Cardiology (1. a-iv,v; b-ii, iii, c-l, ii)
6. Discuss the important aspects of Gastroenterology (1. a-iv,v; b-ii, iii, c-l, ii)
7. Discuss the important aspects of Neurology (1. a-iv,v; b-ii, iii, c-l, ii)
8. Discuss the important aspects of Urology (1. a-iv,v; b-ii, iii, c-l, ii)
9. Discuss the important aspects of Obstetrics and Gynecology (1. a-iv,v; b-ii, iii, c-l, ii)
10. Discuss the important aspects of Endocrinology (1. a-iv,v; b-ii, iii, c-l, ii)
11. Discuss the important aspects of Pediatrics (1. a-iv,v; b-ii, iii, c-l, ii)
12. Discuss the important aspects of Geriatrics (1. a-iv,v; b-ii, iii, c-l, ii)
13. Perform skills related to above areas of Medicine (2. b-l,ii, vi; c-l, iii; d-ii; e-l, ii, iii)
14. Demonstrate assisting with related procedures (2. b-l,ii, vi; c-l, iii; d-ii; e-l, ii, iii)

Course Content

A general description of lecture/discussion topics included in this course are listed in the Learning Objectives / Specific Course Objectives sections of this syllabus.

Applicable to All units:

AAMA/CAAHEP 2008 Standards

1. Assist physician with patient care.
2. Prepare a patient for procedures and/or treatments.
3. Practice standard precautions.
4. Document patient care.
5. Document patient education.
6. Practice within the standard of care for a medical assistant.
7. Apply critical thinking skills in performing patient assessment and care.
8. Use language/verbal skills that enable patients' understanding.
9. Demonstrate empathy in communicating with patients, family, and staff.
10. Use appropriate body language and other nonverbal skills in communicating with patients, family and staff.
11. Demonstrate awareness of the territorial boundaries of the person with whom you are communicated.
12. Demonstrate sensitivity appropriate to the message being delivered.
13. Demonstrate recognition of the patients' level of understanding in communications.
14. Recognize and protect personal boundaries in communicating with other.
15. Demonstrate respect for individual diversity, incorporation awareness of one's own biases in area including gender, race, religion, age, and economic status.
16. Apply active listening skills.
17. Apply local, state, and federal health care legislation and regulation appropriate to the medical assisting practice setting.

ABHES Competencies:

1. Assist the physician with the regimen of diagnostic and treatment modalities and they relate to each body system.
2. Comply with federal, state, and local health laws and regulations.
3. Serve as a liaison between the physician and others.

4. Show empathy and impartiality when dealing with patients.
5. Document accurately.

Unit I – Dermatology

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families, at the end of the unit, the student will be able to:

1. Describe common skin disorders.
2. Describe implications for treatment related to pathology.
3. Explain common diagnostic procedures.
4. Prepare the patient for examination of the integument.
5. Assist the physician with examination of the integument.
6. Identify guidelines for applying bandages.
7. Apply a warm or cold compress (27-1).
8. Assist with therapeutic soaks (27-2).
9. Apply a tubular gauze bandage (27-3).

Unit II – Orthopedics

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families, at the end of the unit, the student will be able to:

1. Describe disorders of the musculoskeletal system.
2. Identify and explain diagnostic procedures of the musculoskeletal system.
3. Describe the various types of ambulatory aids.
4. Apply an arm sling (28-1).
5. Apply cold packs (28-2).
6. Use a hot water bottle or commercial hot pack (28-3).
7. Measure a patient for axillary crutches (28-4).
8. Instruct a patient in various crutch gaits (28-5).

Unit II – Ophthalmology and Otolaryngology

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families have at the end of the unit, the student will be able to:

1. List and define disorders associated with the eye and identify commonly performed diagnostic procedures.
2. List and define disorders associate with the ear and identify commonly performed diagnostic procedures.
3. List and define disorders associated with the nose and throat and identify commonly performed diagnostic procedures.
4. Describe patient education procedures associated with the eye, ear, nose, and throat.
5. Measure distance visual acuity with a Snellen chart (29-1)
6. Measure color perception with an Ishihara color plate book (29-2).
7. Instill eye medication (29-3).
8. Irrigate the eye (29-4).
9. Irrigate the ear (29-5).
10. Administer an audiometric hearing test (29-6).
11. Instill ear medication (29-7).
12. Instill nasal medication (29-8).

Unit IV – Pulmonary Medicine

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families have at the end of the unit, the student will be able to:

1. Identify the primary defense mechanisms of the respiratory system.
2. Explain various diagnostic procedures of the respiratory system.

3. Discuss the role of the medical assistant with regard to various diagnostic and therapeutic procedures.
4. Instruct a patient in the use of the peak flow meter (30-1).
5. Administer a nebulized breathing treatment (30-2).
6. Perform a pulmonary function test (30-3).

Unit V – Cardiology

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families have at the end of the unit, the student will be able to:

1. List and describe common cardiovascular disorders.
2. Identify and explain common cardiovascular procedures and test.
3. Describe the roles and responsibilities of the medical assist and during cardiovascular examinations and procedures.
4. Discuss the information recorded on a basic 12-lead electrocardiogram.
5. Explain the purpose of a Holter monitor.
6. Perform electrocardiography (31-1).
7. Apply a Holter monitor for a 24-hour test (31-2).

Unit VI – Gastroenterology

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families have at the end of the unit, the student will be able to:

1. List and describe common disorders of the alimentary canal and accessory organs.
2. Identify and explain the purpose of common procedures and test associated with the gastrointestinal system.
3. Describe the roles and responsibilities of the medical assistant in diagnosing and treating disorders of the gastrointestinal system.
4. Assist with colon procedures (32-1).

Unit VII – Neurology

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families have at the end of the unit, the student will be able to:

1. Identify common diseases of the nervous system.
2. Describe the physical and emotional effects of degenerative nervous system disorders.
3. List potential complications of a spinal cord injury.
4. Name and describe the common procedures for diagnosing nervous system disorders.
5. Assist with lumbar puncture (33-1).

Unit VIII - Urology

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families have at the end of the unit, the student will be able to:

1. List and describe the disorders of the urinary system and the male reproductive system.
2. Describe and explain the purpose of various diagnostic procedures associated with the urinary system.
3. Discuss the role of the medical assistant in diagnosis and treating disorders of the urinary system and the male reproductive system.
4. Perform a female urinary catheterization (34-1).
5. Perform a male urinary catheterization (34-2).
6. Instruct a male patient on the testicular self-examination (34-3).

Unit IX – Obstetrics and Gynecology

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families have at the end of the unit, the student will be able to:

1. List and describe common gynecologic and obstetric disorders.

2. Identify the role of the medical assistant in the care of gynecologic and obstetric patients.
3. Describe the components of prenatal and postpartum care.
4. Explain the diagnostic and therapeutic procedures associated with the female reproductive system.
5. Identify the various methods of contraception.
6. Describe menopause.
7. Instruct the patient on the breast self-examination (35-2).
8. Assist with the pelvic examination and Pap smear (35-2).
9. Assist with colposcopy and cervical biopsy (35-3).

Unit X – Endocrinology

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families have at the end of the unit, the student will be able to:

1. Identify abnormal conditions of the thyroid, pancreas, adrenal, and pituitary glands.
2. Describe the test commonly used to diagnose disorders of these endocrine system glands.
3. Explain your role in working with patients with endocrine system disorders.
4. Manage a patient with a diabetic emergency (36-1).

Unit XI – Pediatrics

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families have at the end of the unit, the student will be able to:

1. List safety precautions for the pediatric office.
2. Explain the difference between a well-child and a sick-child visit.
3. List types and schedule of immunizations.
4. Describe the types of feelings a child might have during an office visit.
5. List and explain how to record the anthropometric measurements obtained in a pediatric visit.
6. Identify two injection sites to use on an infant and two used on a child.
7. Describe the role of the parent during the office visit.
8. List the names, symptoms, and treatments for common pediatric illnesses.
9. Obtain an infant's length and weight (37-1).
10. Obtain the head and chest circumference (37-2).
11. Apply a urinary collection device (37-3).

Unit XII – Geriatrics

Using critical thinking skills and demonstrating respect for diversity in approaching patients and families have at the end of the unit, the student will be able to:

1. Explain how aging affect thought process.
2. Describe methods to increase compliance with health maintenance programs among older adults.
3. Discuss communication problems that may occur with the older adult and list steps to maintain open communication.
4. Recognize and describe the coping mechanisms used by the older adult to deal with multiple losses.
5. Name the risk factors and signs of elder abuse.
6. Explain the types of long-term care facilities available.
7. Describe the effects of aging of the way the body processes medication.
8. Discuss the responsibility of the medical assistants with regard to teaching older adult patients.

Methods of Instruction/Course Format/Delivery

Students are expected to demonstrate basic competency in reading, writing, oral communication, math, and computer skills. Students are expected to be an active learning participant by assuming accountability in preparing for each class by completing required readings and/or other learning activities as listed in each unit assignment. Proficiency will be measured by examination scores, oral discussions and/or presentations, case studies and internet research activities.

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Students should use the Email within Canvas to communicate with the instructor. Using Canvas email gives you access to the instructor and other classmates without having to remember or type email addresses – you must select a name from the list. If you are not able to contact me using email in Canvas, you may use my Panola College email address, contact me by telephone, or stop by my office. I attempt to respond to all email within 24 hours. Please always include a subject line and your name in your email.

Major Assignments/Assessments

The following items are assigned and assessed during the semester and used to calculate the student's final grade.

Assignments

Assignments

1. Read each chapter and complete quiz for each as assigned.
2. MA Role play scenario creation and demonstration
3. Skills checkoffs
4. Exams

Assessments

Assessments

1. Exam 1 (chapters 21,22,23, and 33)
2. Exam 2 (chapters 24,30,31, and 35)
3. Exam 3 (chapters 25,26,27,28, and 36)
4. Final exam (comprehensive)
5. Skill evaluations
6. Chapter assignments

Course Grade

The grading scale for this course is as follows:

- Assignments-20%
- Exams (1-3)- 30%
- Final Exam -20%
- Lab Skills Checkoffs – 30%

Texts Materials, and Supplies

Comprehensive Medical Assisting, Sixth Edition, Lindh, W., Tamparo, C., Dahl, B., Morris, J., and Correa, C.

Required Readings

Comprehensive Medical Assisting, Sixth Edition, Lindh, W., Tamparo, C., Dahl, B., Morris, J., and Correa, C.

Other

- Courses conducted via video conferencing may be recorded and shared for instructional purposes by the instructor.
- For current texts and materials, use the following link to access bookstore listings: <https://www.panolacollegestore.com>.
- For testing services, use the following link: <https://www.panola.edu/student-services/student-support/academic-testing-center>.
- The Accommodations & Disability Support (A&DS) Office at Panola College provides and facilitates support services and accommodations for students with disabilities. The A&DS office works under the federal guidelines included in Section 503 of the Rehabilitation Act of 1973 and the American with

Disabilities Act. Please contact the Accommodations & Disability Support (A&DS) Office located in the Charles C. Matthews Student Center or go to <https://www.panola.edu/disabilitysupport> 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.
- Student Handbook: <https://www.panola.edu/> (located on at the bottom under student)

SCANS Criteria

1. Foundation skills are defined in three areas: basic skills, thinking skills, and personal qualities.
 1. Basic Skills: A worker must read, write, perform arithmetic and mathematical operations, listen, and speak effectively. These skills include:
 1. Reading: locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.
 2. Writing: communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.
 3. Arithmetic and Mathematical Operations: perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.
 4. Listening: receive, attend to, interpret, and respond to verbal messages and other cues.
 5. Speaking: Organize ideas and communicate orally.
 2. Thinking Skills: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively. These skills include:
 1. Creative Thinking: generate new ideas.
 2. Decision Making: specify goals and constraints, generate alternatives, consider risks, and evaluate and choose the best alternative.
 3. Problem Solving: recognize problems and devise and implement plan of action.
 4. Visualize ("Seeing Things in the Mind's Eye"): organize and process symbols, pictures, graphs, objects, and other information.
 5. Knowing How to Learn: use efficient learning techniques to acquire and apply new knowledge and skills.
 6. Reasoning: discover a rule or principle underlying the relationship between two or more objects and apply it when solving a problem.
 3. Personal Qualities: A worker must display responsibility, self-esteem, sociability, self management, integrity, and honesty.
 1. Responsibility: exert a high level of effort and persevere toward goal attainment.
 2. Self-Esteem: believe in one's own self-worth and maintain a positive view of oneself.
 3. Sociability: demonstrate understanding, friendliness, adaptability, empathy, and politeness in group settings.
 4. Self-Management: assess oneself accurately, set personal goals, monitor progress, and exhibit self-control.
 5. Integrity and Honesty: choose ethical courses of action.
2. Workplace competencies are defined in five areas: resources, interpersonal skills, information, systems, and technology.
 1. Resources: A worker must identify, organize, plan, and allocate resources effectively.
 1. Time: select goal-relevant activities, rank them, allocate time, and prepare and follow schedules.
 2. Money: Use or prepare budgets, make forecasts, keep records, and make adjustments to meet objectives.
 3. Material and Facilities: Acquire, store, allocate, and use materials or space efficiently. Examples: construct a decision timeline 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.
 2. Interpersonal Skills: A worker must work with others effectively.
 1. Participate as a Member of a Team: contribute to group effort.
 2. Teach Others New Skills.
 3. Serve Clients/Customers: work to satisfy customer's expectations.
 4. Exercise Leadership: communicate ideas to justify position, persuade and convince others, responsibly challenge existing procedures and policies.

5. Negotiate: work toward agreements involving exchange of resources, resolve divergent interests.
 6. 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.
3. Information: A worker must be able to acquire and use information.
 1. Acquire and Evaluate Information.
 2. Organize and Maintain Information.
 3. Interpret and Communicate Information.
 4. 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 databases to research a report; use a computer spreadsheet to develop a budget.
 4. Systems: A worker must understand complex interrelationships.
 1. Understand Systems: know how social, organizational, and technological systems work and operate effectively with them.
 2. Monitor and Correct Performance: distinguish trends, predict impacts on system operations, diagnose deviations in systems' performance and correct malfunctions.
 3. 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.
 5. Technology: A worker must be able to work with a variety of technologies.
 1. Select Technology: choose procedures, tools or equipment including computers and related technologies.
 2. Apply Technologies to Task: understand overall intent and proper procedures for setup and operation of equipment.
 3. 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.