

**MODESTO JUNIOR COLLEGE
MEDICAL ASSISTING PROGRAM
Syllabus**

Course Number: MDAST 324

Course Title: Introduction to Disease and Pharmacology

Course

Description: Medical terminology related to the human body in health and disease. Pathogenesis and discussion of representative diseases; signs and symptoms of many major diseases and basic drugs used in treatment.

Credit: 4 units

Class Hours: Hybrid Course / 4 hour-lab per week

Instructor: Melinda Marin email: martinm@yosemite.edu
Office Hours: by appointment or after class
Students are welcome to email
Class Location: Lecture-Online Lab-GH207/210

Methods of Instruction: This course will be taught by lecture, collaborative learning experience, guided discussion, audio-visual materials, case studies, and demonstration of clinical procedures.

Texts: Niedzwiecki, Pepper, & Weaver (2020). The Medical Assistant (14th ed.). St. Louis, Missouri: Elsevier

Niedzwiecki, Pepper, & Weaver (2020). Study Guide and Procedure Checklist Manual for The Medical Assistant (14th ed.). St. Louis, Missouri: Elsevier

**Minimum
Performance
Standards:**

The student will receive one grade from this course. The requirements for satisfactory completion and minimum performance in this course will be evaluated by the instructor based on the student's:

- I. **Tests, quizzes, class assignments, computer assignments and written assignments.**
- II. **Successful completion of entry-level procedures for the medical assistant.**

The student then has a maximum of three attempts to achieve a satisfactory rating by the instructor for each procedure. **“Achievement of the competencies” means that each student has successfully achieved 100% of the MAERB Core Curriculum psychomotor (skills) and affective (behavior) competencies taught with that course. The student must successfully complete all of the psychomotor (skills) and affective (behavior) competencies in the course.**

Failure to clearly demonstrate any of the Minimum Performance Standards will result in failure of the course.

If the student's performance falls below a “C”, the instructor will require a counseling session with the student and complete a Student Contact Sheet.

If improvement does not take place, the instructor will initiate another meeting with the student and complete a Probation Notice.

If the student's performance remains unsatisfactory, the student will need to repeat the entire course.

Any student required to repeat a medical assisting course will be required to withdraw from the program and reapply to repeat the course the following year.

Grading

Scale: **The grading policy requires a grade of “C” or better to progress in the Medical Assisting Program.**

A = 100-90%

B = 89-80%

C = 79-70%

D = 69-60%

F = 59 and below

A. COURSE GOAL

As a result of satisfactory completion of this course, the student should be prepared to:

Define diseases and disease-related terms as well as know the current and commonly used practices, procedures, medications and drug preparations; and satisfactorily complete clinical procedures.

B. STUDENT LEARNING GOALS

Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals

Upon satisfactory completion of this course, the student will be able to:

- a. Identify etiological factors of disease.
- b. Define the common terms used to describe pathophysiological changes.
- c. Describe the infectious disease process.
- d. Discuss factors regarding the healing process.
- e. Identify signs and symptoms that occur in many common diseases.
- f. Develop ability to record medical information accurately in the medical record.
- g. Identify sources, use, classification and types of drugs.
- h. Give examples of drugs frequently used in various categories for therapy.
- i. Interpret abbreviations and symbols used in pharmacology.

- j. Use appropriate reference books to locate accurate information regarding use of drugs.
- k. Define various diagnostic procedures for the body systems.
- l. Demonstration of the medical assistant's role in assisting with body systems procedures.

COURSE LEARNING OUTCOMES

Upon satisfactory completion of this course, the student should be prepared to:

1. Identify the signs, symptoms and treatments for common diseases.
2. Identify fifty common medications and their uses.

CHAPTER 31 Ophthalmology and Otolaryngology

PREPARATION:

**Read Chapter 31 in The Medical Assistant
Complete Chapter 31 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter covers the basic anatomy of the eye and ear. Major disorders and common refractive errors are identified as well as the treatment for these disorders. Irrigation of the eye and ear and the administration of medication to both the eye and ear are addressed.

LEARNING OBJECTIVES:

1. Explain the differences among an ophthalmologist, an optometrist, and an optician.
2. Identify the anatomic structures of the eye and discuss the process of vision.
3. Identify the anatomic structures of the ear, and explain functions of the external ear, middle ear, and inner ear.
4. Differentiate among the major types of refractive errors.
5. Summarize typical disorders of the eye and eyeball other than refractive errors.
6. Describe the conditions that can lead to hearing loss, including conductive and sensorineural impairments.
7. Define other major disorders of the ear, including otitis, impacted cerumen, and Meniere's disease.
8. Assist with the ophthalmology examination, and discuss what the acronym PERRLA stands for.

9. Assist with the otolaryngology examination, and discuss useful questions for gathering a history of ear problems.
10. Discuss distance visual acuity, and perform a visual acuity test using the Snellen chart.
11. Discuss visual acuity and assess color acuity using the Ishihara test.
12. Assist with otolaryngology diagnostic procedures, and use an audiometer to accurately measure a patient's hearing acuity.
13. Assist with ophthalmology treatments, and explain the purposes of and the proper procedures for eye irrigation and the instillation of eye medication.
14. Assist with ophthalmology treatments, identify the purposes of ear irrigations and the instillation of ear medications, and demonstrate the proper procedures for both ear irrigation and instilling medicated eardrops.

COMPETENCIES:

Cognitive Knowledge:

- I.C.5. Identify the anatomical location of major organs in each body system
- I.C.7. Identify the normal function of each body system
- I.C.8. Identify common pathology related to each body system including:
 - b. symptoms
 - c. diagnostic measures
- II.C.3. Identify normal and abnormal results as reported in:
 - a. graphs
- V.C.3. Identify techniques for overcoming communication barriers

Psychomotor Skills:

- I.P.3. Perform patient screening following established protocols
- I.P.4. Verify the rules of medication administration:
 - a. right patient
 - b. right medication
 - c. right dose
 - d. right route
 - e. right time
 - f. right documentation
- I.P.8. Instruct and prepare a patient for a procedure or a treatment

PROCEDURES:

- 31.1** Measure Distance Visual Acuity with the Snellen chart
- 31.2** Assess Color Acuity using the Ishihara test
- 31.3** Measure Hearing Acuity with an Audiometer
- 31.4** Irrigate a Patient's Eye
- 31.5** Instill an Eye Medication
- 31.6** Irrigate a Patient's Ear
- 31.7** Instill Ear Drops

CHAPTER 32 Dermatology

PREPARATION:

**Read Chapter 32 in The Medical Assistant
Complete Chapter 32 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter covers the basic anatomy and physiology of the integumentary system. Additionally, the common disorders, diseases and medications associated with the body system are discussed.

LEARNING OBJECTIVES:

1. Describe the anatomic structure of the skin.
2. Discuss the physiology of the integumentary system.
3. Compare various skin lesions and give examples of each.
4. Describe typical integumentary system infections and infestations.
5. Differentiate among various inflammatory and autoimmune integumentary disorders.
6. Recognize burns and cold injuries to the skin.
7. Describe skin malignancies and their treatment and define the ABCDE rule for identifying a malignant melanoma.
8. Discuss how to assist with a dermatologic examination.
9. Explain dermatologic procedures performed in the ambulatory care setting.

COMPETENCIES:

Cognitive Knowledge:

- I.C.8. Identify common pathology related to each body system including:
 - c. etiology

PROCEDURES:

None

CHAPTER 33 Allergy and Infectious Disease

PREPARATION:

**Read Chapter 33 in The Medical Assistant
Complete Chapter 33 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter covers when working with allergies and infectious diseases it is important to be familiar with the lymphatic and immune systems. They are two different systems; however, they cooperate and work together to maintain homeostasis.

LEARNING OBJECTIVES:

1. List the major organs and structures for the immune and lymphatic systems
2. Describe the physiology of the immune and lymphatic systems. Also discuss allergies and differentiate between active and passive immunity.
3. Identify the etiology, signs and symptoms, diagnostic procedures, and treatment of autoimmune diseases and disorders.
4. Identify the etiology, signs and symptoms, diagnostic procedures, and treatment of HIV/AIDS.
5. Identify the etiology, signs and symptoms, diagnostic procedures, and treatment of lymphoma.
6. Identify the etiology, signs and symptoms, diagnostic procedures, and treatment of multiple myeloma. Also, identify these factors for infectious diseases of the immune and lymphatic systems, such as viral hepatitis, sexually transmitted infections, and respiratory infections.
7. Describe the medical assistant's role in assisting with the examination and with diagnostic procedures associated with allergies and infectious diseases.
8. Describe treatments for allergies and respiratory infections.

COMPETENCIES:

Cognitive Knowledge:

- I.C.8. Identify common pathology related to each body system including:
 - d. diagnostic measures
- III.C.2. Identify the infection cycle, including:
 - e. portals of entry

PROCEDURES:

None

CHAPTER 34 Gastroenterology

PREPARATION:

**Read Chapter 34 in The Medical Assistant
Complete Chapter 34 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter covers the basic anatomy and physiology of the gastrointestinal system. Additionally, the common disorders, diseases and medications associated with the body system are discussed.

LEARNING OBJECTIVES:

1. Discuss the anatomy of the gastrointestinal system and the accessory organs. Also describe the sections of the small and large intestines, the functions, of the liver, and life span changes associated with the gastrointestinal system.
2. Describe the four processes that occur in the gastrointestinal system and discuss the chemical digestion of carbohydrates, proteins, and fats.
3. Identify common signs, symptoms, and etiologies of gastrointestinal disorders and discuss disorders of the mouth, esophagus, and stomach.
4. Discuss disorders of the intestines.
5. Discuss disorders of the accessory organs and explain how hepatitis A, B, C, D and E, are transmitted.
6. Discuss cancers of the gastrointestinal system.
7. Describe the medical assistant's role in gastrointestinal procedures, list examples of screening questions, and describe the diagnostic tests and procedures for common gastrointestinal disorders.
8. Identify CLIA-waived tests associated with common gastrointestinal disorders.
9. Describe the treatments for common gastrointestinal disorders.

COMPETENCIES:

Cognitive Knowledge:

- I.C.1. Identify structural organization of the human body
- IV.C.3. Identify the special dietary needs for:
 - g. gluten-free

Psychomotor Skills:

- I.P.10. Perform a quality control measure
- V.P.4. Demonstrate professional telephone techniques
- V.P.5. Document telephone messages accurately

Affective Behavior:

- A.1. Document critical thinking skills

PROCEDURES:

- 34.1 Use Critical Thinking When Performing Patient Screening**
- 34.2 Coach Patient on Health Maintenance: Guaiac Fecal Occult Blood Test**
- 34.3 Develop a Hemoccult Card and Perform Quality Control**

CHAPTER 35 Orthopedics and Rheumatology

PREPARATION:

Read Chapter 35 in The Medical Assistant

Complete Chapter 35 in the Study Guide and Procedure Checklist Manual

CONTENT:

The chapter describes the duties of the medical assistant in an orthopedic practice, including assisting patients with ambulatory devices. Additionally, medications, injuries and disorders related to the body system are addressed.

LEARNING OBJECTIVES:

1. List major structures of the musculoskeletal system and identify the anatomic location of the structure.
2. Describe the normal function and physiology of the musculoskeletal system.
3. Discuss the diseases and disorders related to the musculoskeletal system.
Also:
 - Identify the common signs and symptoms of musculoskeletal conditions.
 - Identify the common etiology of musculoskeletal conditions.
 - Describe diagnostic measures used for musculoskeletal conditions.
 - Identify CLIA-waived tests associated with common musculoskeletal conditions.
 - Describe treatment modalities used for musculoskeletal conditions.
4. Discuss the medical assistant's role in orthopedics and rheumatology procedures and describe topics to address when coaching a patient on cast care, hot or cold applications, and assistive devices.

COMPETENCIES:

Psychomotor Skills:

- I.P.8. Instruct and prepare a patient for a procedure or a treatment

PROCEDURES:

- 35.1** Assist with the Application of a Cast
- 35.2** Assist with Cast Removal
- 35.3** Apply a Cold Pack
- 35.4** Apply a Hot Pack
- 35.5** Coach a Patient in the Use of Axillary Crutches
- 35.6** Coach a Patient in the Use of a Walker
- 35.7** Coach a Patient in the Use of a Cane

CHAPTER 36 Neurology

PREPARATION:

**Read Chapter 36 in The Medical Assistant
Complete Chapter 36 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter outlines the disorders, diagnostic procedures and treatments related to the nervous system.

LEARNING OBJECTIVES:

1. Summarize the anatomy of the nervous system and compare the structure and function of the nervous system across the life span.
2. Discuss the cells of the nervous system and describe polarization, depolarization, and repolarization.
3. Describe the autonomic nervous system, including the sympathetic and parasympathetic nervous systems.
4. Distinguish among common neurodegenerative diseases.
5. Discuss various functional disorders and describe the three types of seizures.
6. Compare and contrast encephalitis and meningitis.
7. Distinguish among neurological structural diseases.
8. Describe the types of strokes and related treatments.
9. Discuss the medical assistant's role in a neurological exam.
10. Summarize the medical assistant's role with a lumbar puncture procedure.
11. Summarize the patient coaching required for electroencephalography.

COMPETENCIES:

Cognitive Knowledge:

- I.C.8. Identify common pathology related to each body system including:
 - b. symptoms

PROCEDURES:

- 36.1** Perform a Neurologic Status Exam
- 36.2** Assist with the Neurologic Exam
- 36.3** Assist with a Lumbar Puncture
- 36.4** Coach a Patient for an Electroencephalogram

CHAPTER 37 Behavioral Health

PREPARATION:

**Read Chapter 37 in The Medical Assistant
Complete Chapter 37 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter covers mental health and in today's healthcare environment, many healthcare professionals, including medical assistants, are involved with mental health and substance abuse issues, regardless of where they work.

LEARNING OBJECTIVES:

1. Explore the differences between types of common behavioral health professionals.
2. Differentiate among common behavioral health disorders, including the etiology, signs, symptoms, diagnostic procedures, and treatments.
3. Discuss substance use disorders and other addictions. Also, list commonly used substances and describe a "standard" drink of alcohol.
4. Describe how a medical assistant should assist with a mental or behavioral examination.
5. Explain the common diagnostic procedures for behavioral health disorders. Also, describe the common medication classifications used for behavioral health disorders.
6. Explain the legal issues and Health Insurance Portability and Accountability Act (HIPAA) applications associated with mental health disorders and substance use disorders.

PROCEDURES:

None

CHAPTER 38 Endocrinology

PREPARATION:

**Read Chapter 38 in The Medical Assistant
Complete Chapter 38 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter outlines the disorders, diagnostic procedures and treatments related to the endocrine system. The student will be instructed on assisting patients with management of diabetes as well as providing education related to diet and nutrition.

LEARNING OBJECTIVES:

1. Do the following related to the anatomy of the endocrine system:
 - Describe the anatomical location of the major organs of the endocrine system.
 - List the hormones secreted from the endocrine glands.
 - Describe life span changes related to the endocrine system.
2. Explain the physiology of the endocrine system.
3. Identify common disorders of the endocrine system and list common signs and symptoms of endocrine disorders.
4. Differentiate between type 1 and type 2 diabetes mellitus.
5. List signs and symptoms of hypoglycemia, hyperglycemia, and diabetic ketoacidosis, and describe the immediate care required for hypoglycemia and diabetic ketoacidosis.
6. Explain complications of diabetes and discuss gestational diabetes.
7. Discuss the medical assistant's role in endocrinology procedures, including assisting with the examination, diagnostic procedures, and treatments.

PROCEDURES:

38.1 Perform a Monofilament Foot Exam

CHAPTER 39 Cardiology

PREPARATION:

**Read Chapter 39 in The Medical Assistant
Complete Chapter 39 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter will cover the anatomy and physiology of the heart, as well as diseases and disorders related to the body system and medications which treat these conditions.

LEARNING OBJECTIVES:

1. Describe the anatomy of the cardiovascular system.
2. Explain the pulmonary and systemic circulations.
3. Describe coronary circulation, hepatic portal circulation, and fetal circulation.
4. Explain the components in blood and discuss blood types.
5. Describe the life span changes related to the cardiovascular system.
6. Describe the conduction system of the heart, including the three states of a cardiac cell.
7. Describe factors that influence blood pressure.
8. List common signs and symptoms of cardiovascular disorders.
9. Identify disorders of the cardiovascular system, list risk factors for heart disease, and describe the types of shock.
10. Discuss the medical assistant's role in assisting with the cardiology examination.
11. Describe diagnostic procedures, including angiography, cardiac catheterization, Doppler ultrasound, and echocardiography.
12. Describe cardiovascular treatments, including a pacemaker and an implantable cardioverter-defibrillator.

PROCEDURES:

39.1 Measuring Orthostatic Vital Signs

CHAPTER 40 Pulmonary

PREPARATION:

**Read Chapter 40 in The Medical Assistant
Complete Chapter 40 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter addresses the common pathological conditions of the pulmonary system, as well as the procedures and medications used to treat these conditions.

LEARNING OBJECTIVES:

1. Describe the organs of the respiratory system, including their function and anatomical location, and compare the structure and function of the respiratory system across the life span.
2. Discuss the physiology of the respiratory system and explain the process of ventilation.
3. Discuss common chronic and acute respiratory system disorders, including signs, etiology, diagnostic procedures, and treatments. In addition, discuss the hazards of using tobacco products, including cigarettes, smokeless tobacco, and e-cigarettes (vaping).
4. Discuss the medical assistant's role in pulmonary procedures, including assisting with examination and diagnostic procedures such as measuring the peak flow rate and performing spirometry.
5. Describe pulmonary treatments, including metered-dose inhalers, nebulizer treatments, and oxygen therapy.

COMPETENCIES:

Cognitive Knowledge:

- I.C.8. Identify common pathology related to each body system including:
- c. etiology
 - d. diagnostic measures

Psychomotor Skills:

X.P.3. Document patient care accurately in the medical record

PROCEDURES:

- 40.1** Measure Peak Flow Rate
- 40.2** Perform Spirometry Testing
- 40.3** Administer a Nebulizer Treatment
- 40.4** Administer Oxygen per Nasal Cannula or Mask

CHAPTER 41 Urology and Male Reproduction

PREPARATION:

Read Chapter 41 in The Medical Assistant

Complete Chapter 41 in the Study Guide and Procedure Checklist Manual

CONTENT:

Urology is the healthcare specialty that deals with most urinary and male reproductive disorders. A urologist is a specialist involved in the diagnosis, treatment, and prevention of disorders of the urinary system and the male reproductive system.

LEARNING OBJECTIVES:

1. Describe the anatomical location of the major organs of the urinary system.
2. Describe the anatomical location of the major organs of the male reproductive system and explain the process of spermatogenesis.
3. Explain the physiology of the urinary system and describe life span changes related to the urinary system.
4. Explain the physiology of the male reproductive system.
5. List common signs and symptoms of urinary and male reproductive systems diseases and identify common disorders of the urinary and male reproductive systems.
6. Discuss the medical assistant's role in urology procedures and demonstrate how to coach patients regarding health maintenance (e.g., testicular self-exam).
7. Describe diagnostic procedures used for urinary and male reproductive diseases.
8. Identify CLIA-waived tests associated with urinary diseases, and describe treatments used for urinary and male reproductive diseases.

COMPETENCIES:

Cognitive Knowledge:

- I.C.8. Identify common pathology related to each body system including:
 - b. symptoms

PROCEDURES:

- 41.1** Coach a Patient on Testicular Self-Exam

CHAPTER 42 Obstetrics and Gynecology

PREPARATION:

**Read Chapter 42 in The Medical Assistant
Complete Chapter 42 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter covers the basic anatomy and physiology of the female reproductive system. Pregnancy, childbirth and menopause are addressed. Additionally, the common disorders, diseases and medications associated with the body system are discussed.

LEARNING OBJECTIVES:

1. Describe the anatomic location of the major organs of the female reproductive system.
2. Explain the phases of the menstrual cycle and discuss pregnancy and delivery.
3. Discuss sexually transmitted infections and describe the common cancers of the female reproductive system.
4. Discuss endometriosis and list the common infections of the female reproductive system.
5. Specify the signs, symptoms, and treatments for conditions related to menopause.
6. Outline the medical assistant's role in a gynecologic examination (including breast, abdominal, and pelvic examinations), and demonstrate how to assist with a gynecologic examination.
7. Prepare for and assist with the collection of specimens, including those for a Pap test, a maturation index, and tests for various types of vaginal infections.
8. Compare and contrast current contraceptive methods.
9. Discuss post examination duties. Also, describe three of the most common gynecologic procedures performed in the medical office:

- Cryotherapy
 - Colposcopy with or without a biopsy
 - Loop electrosurgical excision procedure (LEEP)
10. Summarize the process of pregnancy and postpartum care, including the prenatal record, the first prenatal examination, return prenatal visits, and the postpartum visit.
 11. Describe the common specialized tests and procedures for obstetric patients.
 12. Describe the possible signs of domestic abuse and know how to report it.

COMPETENCIES:

Cognitive Knowledge:

- | | |
|---------|---|
| I.C.6. | Identify the structure and function of the human body across the life span |
| I.C.8. | Identify common pathology related to each body system including: <ol style="list-style-type: none"> a. signs e. treatment modalities |
| I.C.10. | Identify the classifications of medications, including: <ol style="list-style-type: none"> a. indications for use b. desired effects c. side effects d. adverse reactions |
| V.C.6. | Identify techniques for coaching a patient related to specific needs |

PROCEDURES:

- 42.1** Setting Up for and Assisting the Provider with a Gynecologic Examination
- 42.2** Coach a Patient on Breast Self-Exam

CHAPTER 43 Pediatrics

PREPARATION:

**Read Chapter 43 in The Medical Assistant
Complete Chapter 43 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter summarizes the growth and development of the pediatric patient. Additionally, disorders and infectious diseases common to the patient are discussed.

LEARNING OBJECTIVES:

1. Describe childhood growth patterns.
2. Discuss developmental patterns and therapeutic approaches for infants, toddlers, preschoolers, school-aged children, and adolescents.
3. Describe Erickson's developmental theory.
4. List and describe common pediatric diseases and disorders.
5. Do the following related to the pediatric patient examination:
 - Describe the medical assistant's role in pediatric procedures.
 - Cite reference ranges for pediatric vital signs.
 - Describe how the Apgar scoring system works.
 - List the recommendations of the American Academy of Pediatrics when it comes to the frequency of well-child visits.
 - Discuss sick-child visits, as well as important questions for telephone screening of an older child who can communicate symptoms.
 - Discuss how to measure the circumference of an infant's head and how to obtain an infant's weight and length
6. Assist with diagnostic procedures, including obtain a urine sample.
7. Discuss the current immunization schedule for children from newborn to 18 years old. Also, detail guidelines for childhood immunizations, and document immunizations.
8. Discuss the unique challenges and needs of the adolescent patient.

9. Specify child safety guidelines for injury prevention and management of suspected child abuse.

COMPETENCIES:

Cognitive Knowledge:

- I.C.6. Identify the structure and function of the human body across the life span
- I.C.10. Identify the classifications of medications, including:
 - a. indications for use
 - b. desired effects
 - c. side effects
 - d. adverse reactions
- I.C.13. Identify appropriate vaccinations based on an immunization schedule
- II.C.3. Identify normal and abnormal results as reported in:
 - a. graphs
- V.C.4. Identify the steps in the sender-receiver process
- V.C.5. Identify challenges in communication with different ages groups

Psychomotor Skills:

- II.P.3. Document on a growth chart

PROCEDURES:

- 43.1** Measure the Circumference of an Infant's Head
- 43.2** Measure an Infant's Length and Weight
- 43.3** Document Immunizations

CHAPTER 44 Geriatrics

PREPARATION:

**Read Chapter 44 in The Medical Assistant
Complete Chapter 44 in the Study Guide and Procedure Checklist Manual**

CONTENT:

This chapter examines the changes affecting people as they age, as well as common misconceptions and concerns regarding the aging population.

LEARNING OBJECTIVES:

1. Do the following related to cardiovascular, endocrine, gastrointestinal, integumentary, and musculoskeletal body systems:
 - Explain the changes in the anatomy and physiology of the body systems caused by aging.
 - Summarize the major diseases and disorders faced by older patients.
2. Do the following related to the nervous system, pulmonary system, sensory organs, urinary system, and reproductive systems:
 - Explain the changes in the anatomy and physiology caused by aging.
 - Summarize the major related diseases and disorders faced by older patients.
 - Describe various screening tools for dementia, depression, and malnutrition in aging adults.
3. Summarize the role of the medical assistant in caring for aging patients.
4. Describe the principles of effective communication with older adults.
5. Differentiate among independent, assisted, and skilled nursing facilities.

COMPETENCIES:

Cognitive Knowledge:

- I.C.6. Identify the structure and function of the human body across the life span
- I.C.10. Identify the classifications of medications, including:
 - a. indications for use
 - b. desired effects
 - c. side effects
 - d. adverse reactions
- IV.C.2. Identify the function of dietary supplements
- V.C.5. Identify challenges in communication with different ages groups

Affective Behavior:

- A.3. Demonstrate empathy for patients' concerns

PROCEDURES:

- 44.1** Understand the Sensorimotor Changes of Aging