

SOUTHEAST COMMUNITY COLLEGE
HEALTH SCIENCES DIVISION
MEDICAL ASSISTING
Revision Date: 5/2022
[Syllabus Statements](#)

I. CATALOG DESCRIPTION

Course Number: MEDA 1207
Course Title: Pharmacology and Dosage Calculations
Prerequisite(s): None

Catalog Description: Study of the major drug classifications by body systems; includes patient safety and regulations. Includes basic math, conversions among measurement systems, and solving dosage calculation problems.

Credit Hours: 2
Class Hours: 30
Lab Hours: 0
Total Contact Hours: 30

II. COURSE OBJECTIVES: *Course will:*

1. Acquaint the student with basic pharmacological principles, regulations and drug classifications
2. Identify drugs related to the various body system, their action and patient education required
3. Explain the drug usage according to body system and the patient education required
4. Calculate drug dosages using dimensional analysis

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. STUDENT LEARNING OUTCOMES: *Students will be able to:*

1. Identify commonly used drugs in each of classifications
2. Define drug schedules
3. Identify and define drug categories
4. Demonstrate ability to use drug references
5. Calculate average parenteral dosages from labels provided
6. Use dimensional analysis to calculate dosages
7. Convert body weight from pounds to kilograms and kilograms to pounds

B. GENERAL EDUCATION LEARNING OUTCOMES

GELO 3: Critical Thinking and Problem Solving

Outcome: Collect, identify, interpret, and analyze data.

C. ENTRY LEVEL COMPETENCIES FOR MEDICAL ASSISTING STUDENTS (taken from CAAHEP's 2015 Standards and Guidelines for Medical Assisting Programs)

1. I.C.10. Identify the classifications of medications including:
 - a. indications for use
 - b. desired effects

- c. side effects
 - d. adverse reactions
- 2. II.C.1. Define basic units of measurement in
 - a. the metric system
 - b. the household system
- 3. II.C.2. Identify both abbreviations used in calculating medication dosages
- 4. II.C.3. Analyze healthcare results as reported in:
 - a. graphs
 - b. tables

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

- A. Consumer Safety and Drug Regulations; Drug Names and References; Sources and Bodily Effect of Drugs
- B. Medication, Preparations and Supplies; Abbreviations and Systems of Measurement
- C. Safe Dosage Calculations
- D. Responsibilities and Principles of Drug Administration; Administration by the Gastrointestinal Route
- E. Administration by the Parenteral Route; Poison Control
- F. Vitamin, Minerals, and Herbs
- G. Skin Medications; Autonomic Nervous System; Drugs; Antineoplastic Drugs
- H. Urinary System Drugs
- I. Gastrointestinal Drugs
- J. Anti-Infective Drugs
- K. Eye and Ear Medications
- L. Analgesics, Sedatives, and Hypnotics; Psychotropic Medications, Alcohol and Drug Abuse
- M. Musculoskeletal and Anti-Inflammatory Drugs; Anticonvulsants, Antiparkinsonian Drugs, and Agents for Alzheimer’s Disease
- N. Endocrine System Drugs; Reproductive System Drugs
- O. Cardiovascular Drugs
- P. Respiratory System Drugs and Antihistamines

SCC STANDARD GRADING SCALE POLICY:

A+	95-100	C+	75-79
A	90-94	C	70-74
B+	85-89	D+	65-69
B	80-84	D	60-64
		F	Below 60

The Medical Assisting Education Review Board (MAERB) requires all Medical Assisting students are taught and assessed in all of the cognitive objectives and the psychomotor and affective competencies listed in the 2022 Standards and Guidelines for Medical Assisting Programs.

All students must pass 100% of the psychomotor and affective competencies in order to complete the course and progress in the Program and graduate. Medical Assisting Program students must receive a minimum grade average of a 75% in this course.

VIII. SPECIFIC COURSE REQUIREMENTS– See Course Information Document (CID)