Washtenaw Community College Comprehensive Report

MED 104 Medical Assistant Math and Pharmacology
Effective Term: Winter 2020

Course Cover
Division: Health Sciences
Department: Allied Health
Discipline: Medical Office Worker
Course Number: 104
Org Number: 15900
Full Course Title: Medical Assistant Math and Pharmacology
Transcript Title: Med Asst Math and Pharmacology
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Time Schedule , Web Page
Reason for Submission: Course Change
Change Information:
    Consultation with all departments affected by this course is required.
Rationale: Conditionally approved; seeking full approval.
Proposed Start Semester: Winter 2020
Course Description: In this course, students will review basic math, learn how to safely calculate drug dosages, and administer medications by oral, injectable, and other routes. Students will also learn the classifications of drugs, the top medications in those categories, and relevant dietary requirements for specific patients.

Course Credit Hours
Variable hours: No
Credits: 1
Lecture Hours: Instructor: 15 **Student:** 15
Lab: Instructor: 0 **Student:** 0
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 15 **Student:** 15
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing
Reduced Reading/Writing Scores

College-Level Math

Requisites
Prerequisite
Academic Reading Level 5; Academic Writing Level 3
and
Prerequisite
Admission to Medical Assisting program

General Education
Degree Attributes
Below College Level Pre-Reqs

Request Course Transfer
Proposed For:

Student Learning Outcomes

1. Apply mathematical computations to solve equations.
   ### Assessment 1
   Assessment Tool: Outcome-related questions on departmental exam
   Assessment Date: Winter 2023
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key
   Standard of success to be used for this assessment: 80% of students will score 75% or higher
   Who will score and analyze the data: Departmental faculty

2. Calculate proper dosages of medication for administration.
   ### Assessment 1
   Assessment Tool: Outcome-related questions on departmental exam
   Assessment Date: Winter 2023
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key
   Standard of success to be used for this assessment: 80% of students will score 75% or higher
   Who will score and analyze the data: Departmental faculty

3. Administer parenteral (excluding IV) medications.
   ### Assessment 1
   Assessment Tool: Skill check-off sheets
   Assessment Date: Winter 2023
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Rubrics
   Standard of success to be used for this assessment: 80% of students will score 85% or higher
   Who will score and analyze the data: Departmental faculty

4. Identify relevant dietary requirements and the classifications of medications including indications for use, desired effects, side effects, and adverse reactions.
   ### Assessment 1
   Assessment Tool: Outcome-related questions on departmental exam
   Assessment Date: Winter 2023
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key
   Standard of success to be used for this assessment: 80% of students will score 75% or higher
   Who will score and analyze the data: Departmental faculty

Course Objectives

1. Demonstrate knowledge of basic math computations.
2. Apply mathematical computations to solve equations.
3. Define basic units of measurement in the metric system and the household system.
4. Convert between measurement systems.
5. Identify abbreviations and symbols used in calculating medication dosages.
6. Analyze healthcare results as reported in graphs and tables.
7. Calculate proper dosages of medication for administration.
8. Differentiate between normal and abnormal test results.
9. Maintain lab test results using flow sheets.
10. Document on a growth chart.
11. Reassure a patient of the accuracy of the test results.
12. Identify the classifications of medications including indications for use, desired effects, side effects, and adverse reactions.
13. Verify the rules of medication administration: right patient, right medication, right dose, right route, right time, and right documentation.
14. Select proper sites for administering parenteral medication.
15. Administer oral medications.
16. Administer parenteral (excluding IV) medications.
17. Incorporate critical thinking skills when performing patient assessment.
18. Incorporate critical thinking skills when performing patient care.
19. Show awareness of a patient's concerns related to the procedure being performed.
20. Describe dietary nutrients including carbohydrates, fat, protein, minerals, electrolytes, vitamins, fiber, and water.
21. Define the function of dietary supplements.
22. Identify the special dietary needs for weight control, diabetes, cardiovascular disease, hypertension, cancer, lactose sensitivity, gluten-free, and food allergies.
23. Instruct a patient according to the patient's special dietary needs.
24. Show awareness of a patient's concerns regarding a dietary change.

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Reviewer	Action	Date
Faculty Preparer:		
Rhonda Johns	Faculty Preparer	Sep 09, 2019
Department Chair/Area Director:		
Kristina Sprague	Recommend Approval	Sep 09, 2019
Dean:		
Valerie Greaves	Recommend Approval	Sep 09, 2019
Curriculum Committee Chair:		
Lisa Veasey	Recommend Approval	Oct 04, 2019
Assessment Committee Chair:		
Shawn Deron	Recommend Approval	Oct 10, 2019
Vice President for Instruction:		

Kimberly Hurns   *Approve*   *Oct 14, 2019*