

4/30/2025

DATE

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REQUIRED COURSE

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ELECTIVE COURSE

AHE

DIVISION

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NEW COURSE

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REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	AHE-055		TITLE: (30 Characters Max)		Math for Meds								
SEM CR HRS:	2.0	Lecture:		2.0	Lab:	0.0	ICCB Lab:	0.0	ECH:	2.0			
Course Level:	☐ Gen Ed/IAI ☐ Baccalaureate/Non-IAI		☒ Career/Technical ☐ Dev Ed/Not in Degree Audit		Clinical Practicum:	0.0	Work-based Learning:	0.0	WBL ECH:	0.0			
Course PCS & CIP:	12 - 51.3812		IAI Code:		N/A			Contact Hours (Minutes/Week)					
Repeatable (Y/N):	N	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:		Max:		16 Wks	100	8 Wks	200
Prerequisites:	None												
Corequisites:	None												
Catalog Description: (40 Word Limit)	This course will prepare the student to perform drug calculations safely and accurately. Students will be introduced to the identification and administration of oral and parenteral medications.												

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work-based Learning
Refresher math	4			
Introduction to drug measures	5			
Conversions between measurement systems	8			
Dosage calculations	5			
Intravenous calculations	8			
TOTAL	30	0	0	0

EVALUATION

QUIZZES ☒	EXAMS ☒	ORAL PRES ☐	PAPERS ☐
LAB WORK ☐	PROJECTS ☐	COMP FINAL ☒	OTHER ☐

COURSE MATERIALS

TITLE:	Instructor materials
AUTHOR:	
PUBLISHER:	
VOLUME/EDITION/URL:	
COPYRIGHT DATE:	

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		<i>The student will be able to:</i>
Refresher math	4	1. Demonstrate basic math principles, such as addition, subtraction, multiplication and division of decimals and fractions.
Introduction to drug measures	5	1. Identify symbols in the apothecary, metric and household systems. 2. Recall equivalents/conversions from metric, apothecary and household systems to convert a given measure. 3. Convert a unit of measure to its equivalent in another system of measure (ex., metric to apothecary).

Conversions between measurement systems	8	1. Read drug labels to identify trade and generic name, dosage strength, mixing directions (if applicable), expiration dates, form of medication, amount included in package, and other specific drug info. 2. Read medication records to identify drugs ordered, dosage ordered, time of administration and route of administration. 3. Identify the various containers that parenteral medications are packaged: vials, ampules, mix-o-vials and cartridge-needle units. 4. Describe preparation of solutions from powdered drugs using directions printed on vial labels, drug literature or inserts.
Dosage calculations	5	1. Calculate drug dosage problems using ratio and proportion. 2. Measure oral and parenteral solutions.
Intravenous calculations	8	1. Calculate flow rates for IV administration. 2. Identify the abbreviations used for IV fluid orders and charting.
	30	

Outcomes*	Outcome Title	At the successful completion of this course, students will be able to:
Course Outcome 1	Accurate Calculation	Compute accurate calculations using decimals, fractions, percentages, ratios and proportions in medication dosage problems for adult and pediatric patients.
Course Outcome 2	Medication Dosage	Compute medication dosage calculations through use of metric or household measurement systems.
Primary Laker Learning Competency	Creative Thinking & Problem Solving:	Students think creatively to solve problems.
Secondary Laker Learning Competency	Quantitative Literacy:	Students analyze data and mathematical patterns in real-life situations.

*Course and program outcomes will be used in the software for outcomes assessment and should include at least 1 primary and 1 secondary Laker Learning Competency.