

Basic Course Information

Semester:	Spring 2026	Instructor Name:	Dr. Alejandra Villegas FNP-C, CNE,D NP
Course Title & #:	NURS100 Medication Math	Email:	alejandra.villegas@imperial.edu
CRN #:	20556	Webpage (optional):	
Classroom:	Online	Office #:	
Class Dates:	04/20 to 06/12	Office Hours:	Will be available via email and via text 760-679-4694
Class Days:	Online	Office Phone #:	
Class Times:	online	Emergency Contact:	760-355-6428 Nursing Office
Units:	1		

Course Description

This course focuses on those components of safe medication calculation and administration. The emphasis is on accuracy of calculation and the critical thinking involved in client/patient safety. This is an intense class on med math calculations that is required of all RN majors. Clinical application is integrated into the clinical nursing courses.

In NURS100, the student is required to apply mathematical principles to the calculation of drug dosages. This includes addition, subtraction, multiplication & division of decimals and fractions. A thorough knowledge of the metric system with emphasis on the conversions is required. Dimensional analysis as it applies to calculating drug dosages is included.

Student Learning Outcomes

Upon completion of this class the student will be able to:

Demonstrate understanding by passing a comprehensive final exam on dosage calculations at 78% or higher and overall grade for course of 78% or higher. (ILO2, ILO4) (ILO2, ILO4)

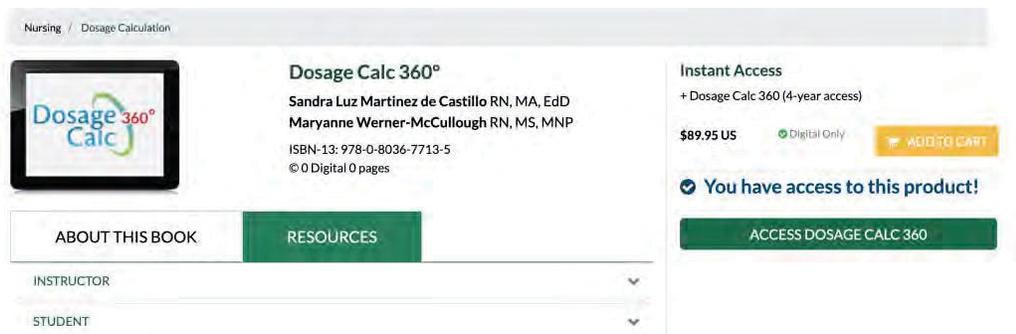
Course Objectives

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

1. Calculate basic mathematic problems including addition, subtraction, multiplication & division of fractions & decimals.
2. Convert metric, apothecary and household measures accurately.
3. Solve dosage problems using dimensional analysis
4. calculate adult & pediatric dosages
5. calculate intravenous flow rates
6. Interpret drug orders and labels relevant to the safe administration of drugs,
7. Discuss the "Seven rights" of clients relative to administration of medications.
8. Describe the routes of administration, po, IM, IV

Textbooks & Other Resources or Links

We will be using Dosage Calc 360 the online form of the textbook. It is required that you purchase this. By purchasing Dosage Calc 360 you will have the e-text and resources for 4 years. I will be posting the information on how to log in in the Modules section of Canvas. You will click on the Dosage calc 360 Module



Course Requirements and Instructional Methods

During the spring 2026 Session, NURS100 is offered as a asynchronous online class Classroom work:

- Weekly modules and assignments open on Sunday 1200am and are due on Friday @11pm
- The student is expected to attend class on Zoom each Tuesday, Wednesday, Thursday
- Tests: There will be exams covering the topics reviewed online in the weekly modules. They will be taken in Canvas.

A student shall treat this course like a job.
There will be:

Homework: Chapter assignments in Dosage Calc 360 (points are assigned by the activity) I use the Module assessments as your score for your score for that module.

Weekly online textbook assignments for each topic count towards your final score exams

Final Exam

Classroom work:

The student is expected to complete all assignments from online class textbook

Tests: There will be exams covering the topics reviewed online in the weekly modules. They will be taken in Canvas.

Late work will be accepted with a 10% deduction per day, until Sunday of the assignment week. After Sunday at 1159pm late work will not be accepted.

Online and Hybrid courses must demonstrate compliance with the IVC [Regular and Effective Contact Policy for Distance Education](#).

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

Course Grading Based on Course Objectives

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This is a nursing course therefore the grading is per the nursing department grading scales.

A = 93-100%

B = 84-92%

C = 78-83%

F = Below 78%

Attendance

The below information is the IVC attendance policy.

- **A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class.** Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See [General Catalog](#) for details.

Logging onto Canvas alone is NOT adequate to demonstrate academic attendance by the student.

Online Netiquette

[Required Information for web-enhanced, hybrid and online courses: Describe your policies regarding netiquette. The below is suggested language and may be modified for your course.]

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!)].

Academic Honesty

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.

Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

IVC Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

*****Tentative, subject to change without prior notice*****

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Week 1-2	<ul style="list-style-type: none"> • Basic Math • Safety in Medication Administration • Systems of Measurement • Linear Ratio and Proportion 	all assignments due on dosage calc 360
Week 3-4	<ul style="list-style-type: none"> • Fractional Ratio and Proportion • Dimensional Analysis • Formula Method • Calculating Oral Medication Doses • Syringes and Needles 	all assignments due on dosage calc 360
Week 5-6	<ul style="list-style-type: none"> • Calculating Parenteral Med Dosages • Preparing Powdered Parenteral Med • Administering Insulin • Calculating for IV Medications and Infusions • Administering IV Push Medications 	all assignments due on dosage calc 360
Week 7-8	<ul style="list-style-type: none"> • Verifying Safe Dose • Titration of Intravenous Medications • Calculating Intake and Output • Calculating for Special Populations 	all assignments due on dosage calc 360 Final