



Basic Course Information

Semester:	Fall 2025	Instructor Name:	Suellen Encinas, RN
Course Title & #:	PHARMACOLOGY I	Email:	suellen.encinas@imperial.edu
CRN #:	11468	Webpage (optional):	Imperial.edu
Classroom:	2110	Office #:	2118
Class Dates:	08/11/25 – 12/06/25	Office Hours:	Thursday 1210-1310
Class Days:	Thursday	Cell Phone #:	(760)879-3941
Class Times:	1320-1445	Emergency Contact:	(760)355-6348
Units:	1.5	Class Format/Modality:	In-Person

Course Description

An introductory course in pharmacology designed to assist the student in acquiring the basic skills of drug dosage calculations and the administration of medications. Clinical application will be integrated into VN 112.

Course Prerequisite(s) and/or Corequisite(s)

Admission to the nursing program.

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Calculate dosages in apothecary and metric system and safely administer medications utilizing the 5 rights in the clinical setting ILO 1,2,4

Course Objectives

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

1. Calculate basic mathematical problems including addition, subtraction, multiplication and division of fractions and decimals.
2. Convert metric, apothecary and household measures accurately.
3. Describe drug orders and labels relevant to the safe administration of drugs.
4. Solve dosage problems using ratio and proportion and given formulas.
5. Calculate adult and pediatric dosages and intravenous flow rates.
6. Discuss the “five and nine rights” of patients relative to administration of medications
7. Describe the routes of administration.
8. Administer oral, topical, sublingual, suppository, and injectable medication; apply medications to mucous membranes, eyes and ears. (Integrated into Nursing 100 (v) skills laboratory requirements and Nursing 112 (v)2 clinical objectives.



Textbooks & Other Resources or Links

Required:

1. Purchase access to www.DosageCalc.com

Course Requirements and Instructional Methods

Classwork: The student is expected to have required materials in class. This includes the required study guides to be worked on during class time.

Class Format: The content is organized into modules (see module outline below). Each module includes several topics, discrete chunks of content for students to master. Each topic is comprised of Learn and Practice pieces. Students must complete the Learn and Practice pieces. Learn delivers the need-to know content in ways that makes it accessible to the student. This includes simple videos, reading and interactive graphics. Practice exercises give students the opportunity to check their understanding in real time. All practice problems include detailed rationales, including sample work in all methods. At the end of each module, students take a module Assessment that ties together the topics within the module and gauges a student's understanding of the content.

Tests: There will be a midterm and a final exam covering the topics reviewed in class.

Note: All on-line content is stamped and as such, must be submitted accordingly.

Methods of instruction: audio visuals, computer assisted instruction, demonstration, group activities, individual assistance, and lecture.

THERE ARE NO MAKE-UP EXAMS REGARDLESS OF EXCUSE.

Out of class assignments:

- No late work will be accepted.
- 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.
- Read assigned chapters and be able to complete an equation using dimensional analysis.
- Submit all assessments/learning activities



Course Grading Based on Course Objectives

Grading will include home assignments, class participation, group projects, no more than 6 quizzes, MidTerm exam, and Final exam. A total grade of 78% and passing the final at 78% or above are required to pass this course. Students must maintain a “C” average grade as determined by the scale below:

A = 93-100%

B = 85-92%

C = 78=84%

F = Below 78%

“GRADES WILL NOT BE ROUNDED”

To advance to the next semester, a total grade of 78% or above AND passing the final at 78% or above is required in this course and the co-requisite courses.

Module Assignments will be due the following week after lecture.

Module Assessments/Learning Activities will be graded on the scale below:

10pts: 93-100%

9pts: 85-92%

8pts: 78=84%

0pts: Below 78%

The student is responsible for dropping (W) the class before the deadline as outlined on registration forms.

Failure to pass this class will affect the ability to progress to the next semester.

Students failing must make an appointment to speak with the Director of Nursing Education.

The student is responsible for making an appointment with their instructor any time their grade average drops below 82.

Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.



Accessibility Statement

Imperial Valley College is committed to providing an accessible learning experience for all students, regardless of course modality. Every effort has been made to ensure that this course complies with all state and federal accessibility regulations, including Section 508 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), and Title 5 of the California Code of Regulations. However, if you encounter any content that is not accessible, please contact your instructor or the area dean for assistance. If you have specific accommodation through DSPS, contact them for additional assistance. We are here to support you and ensure that you have equal access to all course materials.

Course Policies

Each student in this class is expected to respectfully participate. Additional to the learning this class provides, this is a fun course. Please act professionally and keep other students' feelings in mind and refrain from being rude, inappropriate behavior and language in class.

Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.

Food and Drinks are prohibited in all classrooms. Water bottles with lids/caps are the only exception.

Additional restrictions will apply in labs. Please comply as directed by the instructor.

Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.

Children in the classroom: Due to college rules and state laws, only students enrolled in the class may attend; children are not allowed.

Academic Honesty: Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

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Updated 11/2024



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Financial Aid

Your Grades Matter! To continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Making SAP means that you are maintaining a 2.0 GPA, you have successfully completed 67% of your coursework, and you will graduate on time. If you do not maintain SAP, you may lose your financial aid. If you have questions, please contact financial aid at finaid@imperial.edu.

IVC Student 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

[Provide a tentative overview of the readings, assignments, tests, and/or other activities for the duration of the course. A table format as in the example below may be used for this purpose.]

Week	Module	Assignment
1	Syllabus & Introduction DosageCalc 360 Student Orientation	Purchase Dosage Calc 360 DC360 Module Assessment Basic Math
2	Module: Safety in Medication Administration <ul style="list-style-type: none">• Preventing Medication Errors• Medication Administration• Process• Drug Labels	DC360 Module Assessment

	Module: Systems of Measurement <ul style="list-style-type: none"> • The Metric System • The Household System 	
3	Module: Dimensional Analysis <ul style="list-style-type: none"> • Introduction to Dimensional Analysis • Calculating Using Dimensional Analysis 	DC360 Module Assessment
4	Module: Calculating Oral Medication Doses <ul style="list-style-type: none"> • Understanding Types of Medication and Measuring Devices • Oral Dose Calculations 	DC360 Module Assessment
5	Module: Syringes and Needles <ul style="list-style-type: none"> • Introduction to Syringes • Types of Syringes and Needle Lengths and Gauges Module: Calculating Parenteral Medication Dosages <ul style="list-style-type: none"> • Understanding Parenteral Medications • Parenteral Dose Calculations 	DC360 Module Assessment
6	Module: Preparing Powdered Parenteral Medications <ul style="list-style-type: none"> • Introduction to Powdered Parenteral Medications • Reconstitution Problems 	DC360 Module Assessment
7	Review of previous modules from week 2-7 Learning activity	
8	Midterm Exam: Modules from week 2-7	
9	Module: Administering Insulin <ul style="list-style-type: none"> • Introduction to Insulin • Insulin Syringes 	DC360 Module Assessment
10	Module: Calculating for IV Medications and Infusions <ul style="list-style-type: none"> • Understanding IV Infusion • Calculating Flow Rate • Calculating Infusion and Completion Time 	DC360 Module Assessment



	<ul style="list-style-type: none"> • Monitoring IV Therapy 	
11	Module: Administering Direct IV Medications <ul style="list-style-type: none"> • Introduction to Direct IV Therapy • Diluting Direct IV Medications • Calculating Rate of Administration for Direct IV Medications 	DC360 Module Assessment
12	Module: Verifying Safe Dose <ul style="list-style-type: none"> • Introduction to Safe Dose • Weight-based Dosing • Verifying Safe Dose by BSA 	DC360 Module Assessment
13	Module: Titration of Intravenous Medications <ul style="list-style-type: none"> • Introduction to Titration • Solving for Infusion Rate of Titrated Medications 	DC360 Module Assessment
14	Module: Calculating Intake and Output <ul style="list-style-type: none"> • Calculating Oral Intake • Calculating and Recording Output • Calculating Parental Intake • Calculating for Special Populations • General Considerations for the Adult Population • Enteral Nutrition • Considerations for the Pediatric Patient • IV Fluid Replacement Therapy 	DC360 Module Assessment
15	Review previous modules. Modules from week 9-14	
16	Final Exam	

*****Subject to change without prior notice*****