### **Basic Course Information**

Semester:	Winter 2016	Instructor Name:	Pam Hansink BSN, RN
Course Title & #:	Nursing 100	Email:	pam.hansink@imperial.edu
CRN #:	15149	Webpage (optional):	
Classroom:	2139	Office #:	2158
Class Dates:	Jan 19- Jan 29	Office Hours:	Mon - Fri 12:30 -1:30pm
Class Days:	M/T/W/R/F	Office Phone #:	760-355-6530
		_	760-355-6348 Nursing
Class Times:	1:30 - 3:20pm	Emergency Contact:	Office
Units:	1.0 unit		

## **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 evolved in client safety. This is an intense class on med math calculations that is required of all nursing majors. Clinical application is integrated into the clinical nursing courses. (CSU)

In NURS 100 the student is required to apply mathematical principles to the calculation of drug dosages. This includes addition, subtraction, multiplication and 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 course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

- 1. Calculate the flow rate of a simple primary IV line in mL/hr or gtts/min as measured by one (1) randomly identified question on the final exam with a class average for the question at 92% or better. (IL02, IL04)
- 2. Pass a comprehensive final exam on dosage calculations at 75% including critical care and pediatric problems. (ILO2, ILO4)

#### **Course Objectives**

MEASURABLE COURSE OBJECTIVES AND MINIMUM STANDARDS FOR GRADE OF "C": 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 "five rights" of clients relative to administration of medications.
- 8. Describe the routes of administration identifying the appropriate landmarks for each site.

Unit Outcome Competencies:

The student will practice problems in class, in the Nursing Learning Center and at home to develop proficiency in calculations.

#### Textbooks & Other Resources or Links

#### REQUIRED:

CD/Book: Calculating Drug Dosages: An Interactive Approach to Learning Nursing Math, 3<sup>rd</sup> Edition, by Sandra Luz Martinez de Castillo, RN, MA, EdD Copyright © 2012 F.A. Davis Company

#### **RECOMMENDED:**

<u>Dimensional Analysis for Meds, 4<sup>th</sup> Edition</u> Anna M. Curren, MA, RN Copyright © 2010 Delmar Cengage Learning.

May use any other **Dimensional Analysis** dosage calculation book.

### **Course Requirements and Instructional Methods**

Classroom work:

The student is expected to bring required materials to class. This includes the required study guides to be worked on during class time.

Tests:

There will be exams covering the topics reviewed in class.

#### THERE ARE NO MAKE-UP EXAMS REGARDLESS OF EXCUSE.

#### Out of Class Assignments:

There may be homework assignments from the required CD. The results will be printed out and turned into the instructor by date they are due.

#### 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 <u>and</u> 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**

Students must maintain a "C" average grade as determined by the scale below:

A = 92 - 100%

B= 83 - 91%

C = 75 - 82%

D = 68 - 74%

F= Below 68% grades will not be rounded.

### **Attendance**

According to the Imperial Valley College catalog: Regular attendance in all classes is expected of all students enrolled. Instructors are expected to take a student's record into account in computing grades. A student may be excluded from further attendance in a class during any semester when absences after the close of registration have exceeded the number of class hours that the class meets per week. Further, an instructor may drop any student judged to be a disturbing element in the class.

However, the attendance policy of the nursing program is further implemented as follows: Absences will be limited to two (2) hours or one (1) class session for the course.

It is the responsibility of each student to attend all classes and to contact the faculty person before the start of class of any need to be excused from class. A student who reached the maximum allowable hours of absenteeism or tardiness may be dropped by the instructor.

Acceptance of absenteeism excuses is at the discretion of the faculty member and may result in failure of the class.

- 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 <a href="General Catalog">General</a>
  Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused
  absences exceed the number of hours the class is scheduled to meet per week may be dropped. For
  online courses, students who fail to complete required activities for two consecutive weeks may be
  considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

### **Classroom Etiquette**

The appropriate method of instruction will be determined by each instructor and may include, but not be limited to the following: classroom lecture, small group discussions, student presentations, demonstration, simulations, CD or online assisted instruction, audiovisuals, textbooks, handouts and required reading and assignments.

During all classroom time, every person will be respected within the group and it is expected that all interactions between students, faculty and other staff will take place professionally and courteously.

- <u>Electronic Devices</u>: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- <u>Food and Drink</u> 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.
- <u>Disruptive Students:</u> 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 <u>General Catalog</u>.
- <u>Children in the classroom:</u> Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

## **Online Netiquette**

- 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.

- <u>Plagiarism</u> 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.
- <u>Cheating</u> 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.

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.

#### **Additional Student Services**

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- <u>Blackboard Support Site</u>. The Blackboard Support Site provides a variety of support channels available to students 24 hours per day.
- <u>Learning Services</u>. There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your <u>Campus Map</u> for the <u>Math Lab</u>; <u>Reading, Writing & Language</u> Labs; and the Study Skills Center.
- <u>Library Services</u>. There is more to our library than just books. You have access to tutors in the <u>Study Skills Center</u>, study rooms for small groups, and online access to a wealth of resources.

#### Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the <u>Disabled Student Programs and Services</u> (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

# **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- Student Health Center. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District and El Centro Regional Center provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC Student Health Center at 760-355-6310 in Room 2109 for more information.
- Mental Health Counseling Services. Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC Mental Health Counseling Services at 760-355-6196 in Room 2109 for more information.

## **Student Rights and Responsibilities**

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC <u>General Catalog</u>.

## **Information Literacy**

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC <u>Library Department</u> provides numerous <u>Information Literacy Tutorials</u> to assist students in this endeavor.

Anticipated Class Schedule/Calendar				
Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests		
Tuesday 01/19/16	Intro to Course  Basic Math Review  1.Fractions 2. Decimals 3. Percents 4. Ratios 5. Proportions 6. Solve for (X) 7. Roman Numerals 8. Rounding 9. Conversion Table	Study Guides: (on Blackboard) *Solve for (X) * Roman Numerals *Conversion Table  CDD-CD Module Basic Math Do Basic Math  Curren Ch. 1-3		
Wednesday	Exam 1 Basic Math ©			
01/20/16	Systems of Measurement 1. Dimensional Analysis 2. Conversion Tables 3. Metric System Units of Weight 4. Apothecaries' System 5. Household system 6. Dimensional Analysis and conversions between systems 7. Temp conversion formulas 8. Military time  Prep for calculation of drug dosages: 1. Safety in Med. Admin, 2. Interpret of MD orders, 3. How to read drug labels, 4. Abbrev. 5. unit dose	Study Guides: *System conversions *Conversion Table  CDD- CD Methods of Calculation (dimensional analysis), Systems of Measurement  Curren Ch.s 4,5,6,7,9,10,11,12		
m) )	Evam 2: conversions in and between systems of			
Thursday 01/21/16	Exam 2: conversions in and between systems of measurements, Time and Temp ☺  Prep for calculation of drug dosages (cont): 1. Safety in Med. Admin. 2. Interpret of MD orders 3. How to read drug labels 4. Abbrev. 5. unit dose  Dimensional Analysis 1-2 Factors 1. Oral Medications 2. Parenteral Dosages, IVP, IM, SC 3. Dosages in Units .	Study Guides: *Dosage Calculations *IV's *IVPB  CDD-CD Reading Medication Labels  Curren Ch.'s 4,6,7,8,9,10,11,12		
Monday 01/25/16	Mini Quiz: Conversion Table, 6 rights  Dimensional Analysis 1-2 Factors (cont):  1. Oral Medications 2. Parenteral Dosages, IVP, IM, SC 3. Dosages in Units	Study Guides: *Special IV's *Critical Care IV's *Peds		
	IV Fluids:	CDD-CD Admin of Oral Meds, Syringes and Needles, Admin of Parenteral		

Anticipated Class Schedule/Calendar				
Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests		
	1. Tubing: Micro, Macro, Blood 2. Primary line flow rates (gtts/min) 3. Piggy Back (IVPB) flow rates (gtts/min) 4. Blood flow rates 5. Specialty IV: Insulin& Heparin units	Meds, IV calculations <b>Curren:</b> Ch's 4,6,7,8,9,10,11,12,15,16,17,18,19		
Tuesday 01/26/16	Exam 3: Dimensional Analysis: Oral, Parenteral Dosages, and IV's   IV Fluids:  1. Tubing: Micro, Macro, Blood 2. Primary line flow rates (gtts/min) 3. Piggy Back (IVPB) flow rates (gtts/min) 4. Blood flow rates 5. Specialty IV: Insulin& Heparin units 6.Using an IV Pump 7. Blood Flow rates 8. Specialty IV's: Insulin, Heparin and Units	Study Guides: *Special IV's *Critical Care IV's *Peds  CDD-CD: Admin of Oral Medications, Syringes and Needle, Admin of Parenteral Meds, IV Calculations  Curren: Ch's 4,6,7,8,9,10,11,12,15,16,17,18,19,20,21		
Wednesday 01/27/16	Exam 4: IV's: Primary, Piggyback, Specialty and Blood ©  Multifactor Problems Critical Care Problems 1. mcg/kg/min 2.mcg/min 3.reverse calculations 4. verifying rates 5. X-factors  Pediatrics	Study Guides:  *Peds  *Critical Care  CDD-CD: Admin of Oral Medications, Syringes and Needle, Admin of Parenteral Meds, IV Calculations, Pediatrics Calculations  Curren: Ch's 13,14,15,16,17,18,19,20,21		
Thursday 01/28/16	Exam 5: Critical Care Calculations, Pediatric Problems ©	<b>Curren</b> Ch's 13,14,15,16,17,18,19,20,21		
Friday 01/29/16	Final Exam©	13,14,13,10,17,10,18,20,21		

<sup>\*\*\*</sup>Tentative, subject to change without prior notice\*\*\*